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THE FINE ARTS AT THE PARIS EXPOSITION.

A RETROSPECT.



"YOUNG MARSYAS." (DRAWN BY ELIHU VEDDER AFTER HIS PAINTING IN THE EXPOSITION).

BEFORE its memory becomes dim, and before public interest in it, as the latest and the greatest of international displays disappears, let us attempt to record some part of the remarkable history of the Paris Exposition of last summer. Our study will be rather concerning the grounds and the exterior of the buildings than of the exhibition of art and industry itself; except as some works of art in the galleries seem to call for special notice. To do justice to any one department of that great exhibition would call for a longer article than this can be.

And first of the plan we present,—by the

VOL. XVIII.—12.

aid of which and some wood-cuts we hope to give such a description of the grounds and the more prominent buildings as will be readily understood, and an impression that will not immediately fade away of the very important architectural features of the world's fair of 1878. This plan (see page 164) has been prepared under the immediate supervision of the writer, by means of half a dozen official and non-official, more or less accurate surveys and maps and of a tolerably complete familiarity with all parts of the grounds. The great point has been to decide what to leave out. The

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plans published hitherto (except the very slightest and most diminutive) all fail from trying to give too much,—too many incompatible kinds of information. They fail entirely to explain themselves to one who is not on the spot; nobody ever made out from them how the different things described in the newspapers all “go together,” and where each is to be found. They were made, one and all, for the use of the visitors to the grounds, and naturally were concerned with giving to those visitors every sort of guide-book information; how to go the quickest from any one place to any other; where Andorra leaves off and San Marino begins; where post-offices and police-offices and rolling-chairs were to be found, and refreshment shops of all grades; rather with this than with any of the important general features of the exhibition. And naturally so, because with the main characteristics and great general scheme of the exhibition a visitor could hardly fail to be at once strongly impressed. And to give to the non-visitor just such a strong impression is the object of this paper and its illustrations; so the plan has been stripped of all details that could be spared, and simplified until it can be understood at a glance. Everything which is shaded with lines in one direction only, and therefore paler, is within the inclosure but open to the sky. Everything which is shaded with lines running in two directions—that is, all the darker tint—is under cover; all of that is floored and roofed,—all of that and nothing else than that, or at least nothing else more important than a covered seat or a marquee. Everything which is shaded at all is within the exhibition inclosure; and this is the whole of that inclosure, except that on the left, to the south-west of the Trocadéro Park, between the Quay and the Boulevard de Lessert, there is a somewhat greater extent of annexes than is shown. The exact dimensions of this small inclosure the writer had no means of ascertaining. The whole exhibition is thus beneath the reader's eye, always excepting the cattle-show grounds which were not far away to the eastward, on the esplanade of the Invalides. Then, of course, the white parts of the map are Paris without the grounds; and here the reader can see the different approaches by water and by land, and the outside communications kept open between old Paris and the Banlieue, on each side of the river.

The exposition of 1867 was confined to the left bank of the Seine, and occupied the whole Champ de Mars. This big

flat field, famous in Parisian history for many a year, is all on our plan, and extends from the front of the “École Militaire”—so called, though it has long been a barrack for troops—to the river, and from the Avenue de Suffren on the south-west to the Avenue Labourdonaye on the north-east. This has long been a drill-ground and field for maneuvers, and is big enough for a very considerable number of troops to exercise in. It is almost exactly a kilometer long, or thirty-three hundred feet, and rather less than half as wide—say one hundred and fifteen acres of plain,—of dust, one might say with truth, during any but an exhibition summer. Right in the middle of this quadrangle the oval building of 1867 was placed, occupying half of its area, surrounded by a multitudinous swarm of little buildings of all sorts, scattered about a very beautifully disposed garden. The plan of it was the well-known combination of concentric belts representing different departments of industry, with radiating bands representing nations. The visitor started from the outer edge and made his way along the Belgian radius, let us say, from raw material outside to fine art in the innermost belt; or, taking textile fabrics, for instance, one voyaged from his own fatherland around the civilized world and back to his home again, in one circuit of the building. That was clever and well imagined, and there were novel enough devices of construction in the “great gasometer,” as it was called, and plenty of interesting little buildings around it; but none of peculiar importance, and none that have continued in existence. All has passed away from earth, like the imperial government that created it. That government, then at the height of its power and importance, was thought fully enough given to a magnificent, not to say an extravagant, way of doing things. What it did in 1867 was thought reasonably splendid and wholly satisfactory. To be sure the exposition was wholly confined to the Rive Gauche, and it seemed to be a good way from everywhere, and there were no prominent or lofty buildings connected with it, nothing that could be seen from Paris proper, unless from a very high tower indeed. But then it was thought that these were necessary and unavoidable drawbacks. It was the showiest and largest exhibition so far, and the emperor and his “pals,” and the Parisian public and the world of visitors were all very happy about it.

But Paris and France were in a very different humor in 1878 from that of 1867—a

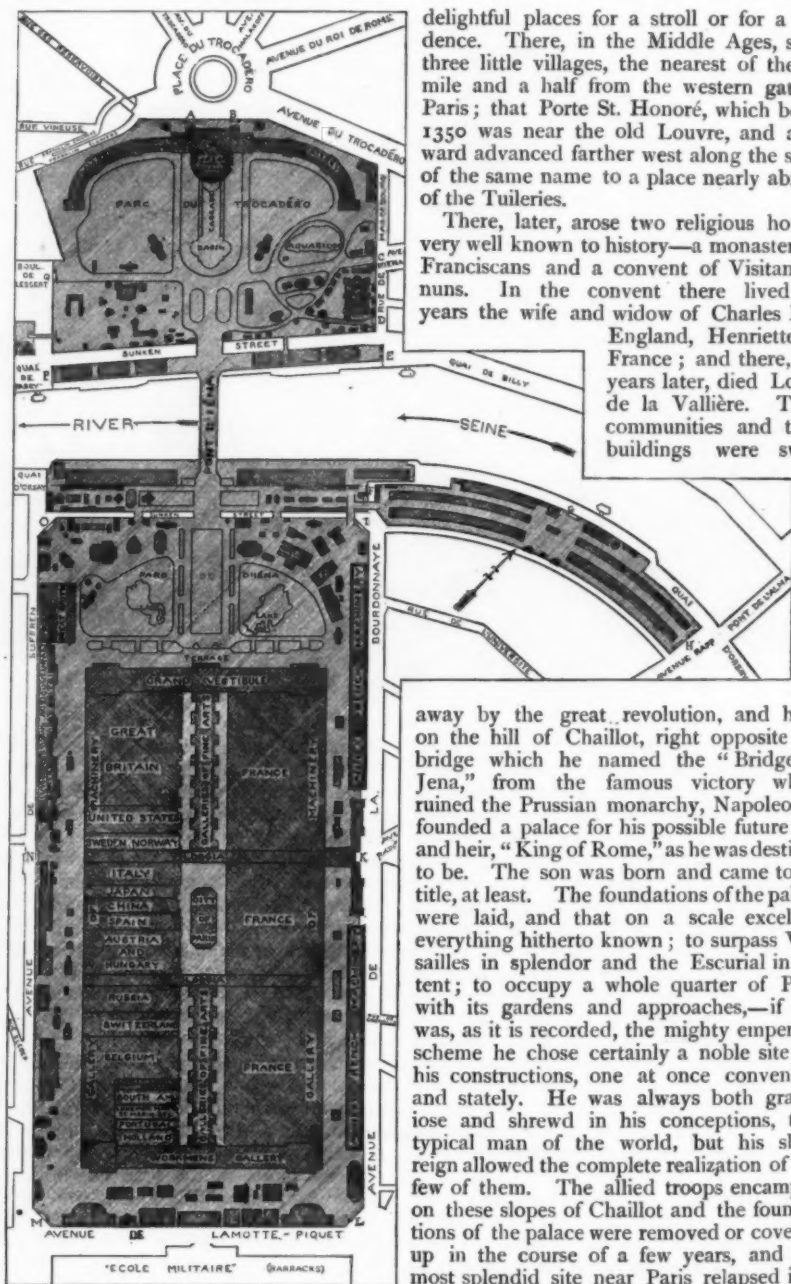


THE TROCADÉRO PALACE.

very different and a more enterprising, more ambitious, immeasurably more intense, mood of mind. Ruinously defeated and amazed at her weakness where she had thought herself the strongest, but full of strength, hope, resource, and a truly youthful energy; lately regarded as impoverished by war, but newly enriched by industry; still doubtful of her military strength, and avowedly so, but rich and growing richer, strong and growing stronger, prosperous and happy perhaps beyond any nation in Europe; as much surprised and gratified at her success in self-government as she had been surprised and shocked at her failure in arms.—France felt herself at once called upon for, and fully capable of, a greater effort than the empire had ever imagined. 1867 had been a busy and a splendid time, but 1878 must needs be still more crowded with incident and with triumph. All the world had come to Napoleon's fête, and now the republic must invite the world to a festival so splendid that no refusal would be possible, and that all former achievements would be surpassed. Of 1867 nothing remained but a remembrance which the later displays at

Vienna, and, to a certain extent, at Philadelphia, had dimmed. But the republican ceremonial of 1878 should leave behind it monuments which would endure for ever. Expense? What question could there be of expense when the national honor was at stake, when the Republic's reputation was concerned, and when it was important that no voice should anywhere be raised that could deny the magnificence and wise liberality of the new government. As to expense, too, the outlay attending the imperial show of 1867 had been exceeded at Vienna in 1873, and even by the most thrifty of nations, the transatlantic republic, at Philadelphia, in 1876; and it was evident to all that there must be no stint this time, and that besides the forty million francs for temporary buildings and temporary expenses, ten millions more might with advantage be spent upon an edifice which, while aiding the temporary need both of space and of splendor, might remain as an added decoration to the capital.

Across the river from the Champ de Mars, on the right bank, the slopes of Chailot and Passy have long been known as



PLAN OF THE PARIS EXPOSITION.

delightful places for a stroll or for a residence. There, in the Middle Ages, stood three little villages, the nearest of them a mile and a half from the western gate of Paris; that *Porte St. Honoré*, which before 1350 was near the old Louvre, and afterward advanced farther west along the street of the same name to a place nearly abreast of the Tuileries.

There, later, arose two religious houses, very well known to history—a monastery of Franciscans and a convent of Visitandine nuns. In the convent there lived for years the wife and widow of Charles I. of England, *Henriette of France*; and there, fifty years later, died *Louise de la Vallière*. These communities and these buildings were swept

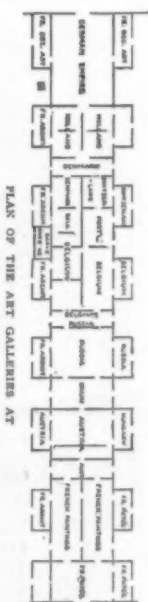
away by the great revolution, and here, on the hill of Chaillot, right opposite the bridge which he named the "*Bridge of Jena*," from the famous victory which ruined the Prussian monarchy, Napoleon I. founded a palace for his possible future son and heir, "*King of Rome*," as he was destined to be. The son was born and came to his title, at least. The foundations of the palace were laid, and that on a scale excelling everything hitherto known; to surpass Versailles in splendor and the Escorial in extent; to occupy a whole quarter of Paris with its gardens and approaches,—if this was, as it is recorded, the mighty emperor's scheme he chose certainly a noble site for his constructions, one at once convenient and stately. He was always both grandiose and shrewd in his conceptions, that typical man of the world, but his short reign allowed the complete realization of but few of them. The allied troops encamped on these slopes of Chaillot and the foundations of the palace were removed or covered up in the course of a few years, and the most splendid site near Paris relapsed into something very like a desert. The people who crossed the *Bridge of Jena* turned east

or west along the quays and never mounted the steep and broken hill, and those bound for Passy took still other roads. But it was an aspiration of the restored Bourbons to replace the Bonapartist traditions by their own. Military successes, indeed, were hardly in order, but one small chance was given them, when the Duc d'Angoulême was posing as a conqueror and a pacificator in Spain, in 1823. A small fort which defended Cadiz Roads, bearing the name "El Trocadero,"—as it does to-day,—was reduced by the French army, and a loyal journal, bravely mixing up several different ideas to make one, proclaimed to all the world that now the sun of Austerlitz was dimmed by the luster of the sun of the Trocadero. So that it came to be proposed to King Louis XVIII., and to be determined on by himself and his advisers, to build a monument or column which should tower over Paris, to commemorate the Spanish expedition; and the heights opposite the Champ de Mars were fixed upon to bear this monument aloft, and christened with the sonorous and Spanish-sounding name of the Trocadero. Nothing came of the monument project under the immediately succeeding reign of Charles X., and the name given to the locality was pretty much forgotten all through the reign of the Citizen King. Although the picturesque and dominant height itself was within the barriers, as they were in Louis Philippe's day, and although, after the fortifications were built, all that district became, as it were, one with Paris, yet the beautiful hill seems to have been neither private property nor public grounds, neither built upon nor cared for. In the early days of the Second Empire it remained still unnoticed. It was not until just before the Exposition of 1867 that the park of the Trocadero was laid out. No one knows how many millions of francs were spent in this work and in building a most prodigious flight of stairs,—only seventy-five steps high, indeed, but wide enough for a hundred men to march up abreast. From this height, thus newly decorated and opened up to the public, Maxime Lalanne took the scene of one of his largest etchings, which shows the buildings of the Exposition of 1867, with the still river and its bridges and distant Paris, and the new esplanade with its lamps and promenaders.

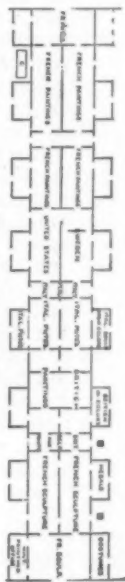
Upon this height, this slope and the bridge connecting them with the Champ de Mars on the left bank, the enterprising officials of the autumn of 1876 fixed their

eyes. It must not be forgotten that all was very symmetrical, so to speak, the two tracts of ground and the bridge between them being all on one axis running north-west and south-east, and just at right angles with the river at that point. There in the plain was the place for the exhibition of contemporary industry, for the great congeries of iron and glass sheds,—larger by half than that of eleven years before,—for the machinery, the products, the invention and the art of the present day. There on the height was the fitting place for such a palace as would be a new ornament even to Paris,—a palace devoted in part to the arts of the past, in the way of a great museum of works of fine art received on loan, and in part devoted to music, to festivity and to ceremonial. Then, by setting back the Palace of Industry well toward the rear of the Champ de Mars, the double park, divided by the river but united by the bridge, half on the level and half on the slope, would be nearly half a mile long from one of the large buildings to the other, and would seem all the larger for its division and for its variety of surface.

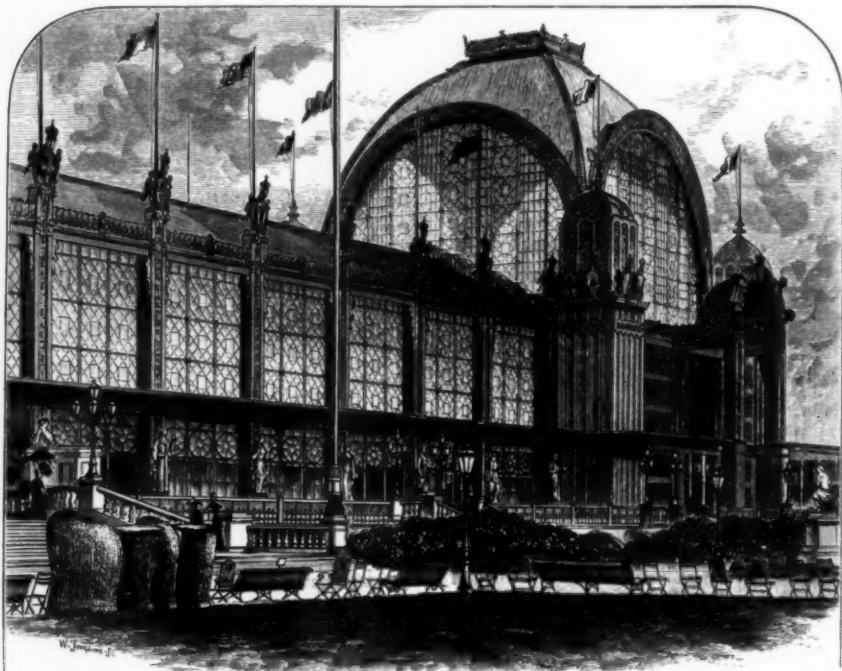
In the map before us, the building at the extreme north-west, or top of the map, is the *Palais des Fêtes*, as it seems to be called officially. It consists of a very large music-hall, or hall of assembly, in the middle, and enormous wings, stretching from north-east to south-west, almost exactly a quarter of a mile. Each of these wings contains a long, continuous, top-lighted gallery; and on the inner side, toward the park and the river, a noble colonnade and sheltered walk runs



PLAN OF THE ART GALLERIES AT



THE PARIS EXPOSITION.



WEST CORNER DOME OF THE MAIN EXPOSITION BUILDING.

unbroken from one end of the building to the other, passing around the music-hall and connecting at each side of it with great open vestibules, which pass through the building from the city to the park. It is from this colonnade, at its extreme south-western end, that the view shown in our cut on page 163 has been taken. This picture shows the main dispositions well enough. The distant pavilion at the extreme end of the opposite wing contains an entrance on the lower level reached by the fall of the ground, and a wide staircase leading up to the floor of the gallery above. A similar arrangement is behind and to the right of the spectator. What the French call *perrons* and New Yorkers call "stoops" (while the rest of the world has no name for them) connect the open colonnade with the broad paths below; and from the colonnade to the gallery within, a door opens on the axis of each of these approaches. These doors, indeed, were kept closed last summer, or barricaded with benches, but that was a mere detail of police arrangements. Of the three open galleries that surround the central mass of the building, the lowermost is

on the level of the colonnades of the wings; the upper ones open from vestibules above the great entrance vestibules of the ground floor. But the simple and excellent arrangement of these stairs and corridors cannot be dwelt upon here. What must be said is however a few words of general criticism of the building, which seems to the writer one of the best productions of modern art, and the reasons for this opinion, which is not that of the newspaper correspondents, may be worth stating.

It must be observed that here is a practical denial of the assertion often made, and with apparent reason, that splendid architecture will not be needed or be possible hereafter. "For us no more the throne of marble, for us no more the vault of gold," said Mr. Ruskin, at Bradford, just twenty years ago, "but the privilege of bringing the power and charm of art within the reach of the humble and the poor." The lecturer did not perceive that the magnificences of architecture in the future, for the benefit of the whole community, and paid for by the whole community, may be at least as great as in the past. It is the splendor of

private buildings that has disappeared forever, leaving only little vanities and prettinesses of upholstery to represent the picturesque of the Elizabethan manor-house and the stately magnificence of the Florentine *palazzo*. And probably splendid church architecture has gone, with great church organizations,—all undermined together and tumbled into a heap by the insidious foe called "right of private judgment." But if any one believes that great communities will be happy without great and splendid buildings, let him consider for a moment one result of the new *régime*: the fact that since the people took their affairs into their own hands wars have been bloodier than ever before,—more gayly undertaken, more bitterly fought out. There are on record the statements of English papers to the effect that loyalty without a prince to be loyal to was an obvious impossibility; that costly war would never be carried on by a people who could make their objections to taxation felt and obeyed, and so forth, and so on. And yet, here is this Yankee nation of "shopkeepers,"—a community known, at last, to be quite willing to spend and be spent for anything it cares about. It is as yet immeasurably more ignorant of what fine art is and is good for, and what is meant by splendor in architecture, decoration, in display, than any other civilized people; but whether it is willing to spend for such purposes or not can best be ascertained by looking at its half dozen great parks, the worst of which excels, not so much in extent as in elaborate ornamentation and in cost, anything that existed in Europe when Central Park was planned, and by looking at the rather blundering attempts to produce fine public buildings at our state and national capitals. Now in all that concerns modern city life and organization Paris is the guide and model; not to be implicitly followed, but as the most brilliant example of lavish outlay, guided in the various departments by trained skill. This palace of the Trocadéro would be impossible to-day in any other city—but wait till a near to-morrow! Is it London town, or New York, or Rome, or Melbourne, or San Francisco that for a similar object will first surpass it, if not in beauty and convenience, at least in expense? Ornate architecture is sought for by all self-governed communities; we have only to hope for the controlling influence of reason and good taste.

The buildings so built for the delectation of the public will have to be very different

from the old palaces and cathedrals. The teachers of architecture have not yet found that out, nor the architects, except in a few cases; it is rare to see any important public building designed for its purpose alone, and without reference to buildings built long ago for wholly different purposes.

This is then one of the peculiar merits of the Trocadéro Palace that it is very novel in plan, and wholly independent. The art galleries are only one story high,—for the top is the best for such galleries; there are enormous open colonnades outside, because all Paris will crowd there of a Sunday and look at the noble view; there is the great concert hall in the middle, perfectly accessible from all parts of the edifice, and from the out-door walks which adjoin it, and from both the city and the park, and yet so wholly disengaged that it has windows all around, except where the great organ and the stage are placed. Now, in the matter of architectural design, there are always some fine distinctions to be made. Let not the reader suppose that this structure is about to be compared with the world-renowned monuments of by-gone styles of architecture. But this building, convenient as we have said, and well adapted to all its purposes, does really sit most gracefully upon its hill-top, its towers group admirably with one another and with the great mass of the concert hall, and the central group so formed composes well with the wings. Seen sidewise, as in the cut, it is picturesque and effective; seen from the Bridge of Jena, or from the Champ de Mars, it is more imposing and stately; everywhere it looks large. M. Gonse, writing in the "*Gazette des Beaux Arts*," thinks that its vast size (the towers are 240 feet high, the rotunda about 180 feet in diameter, the spread of the whole front 1,300 feet measured on the chord) is not fully felt, when viewed from the opposite side of the river: in this opinion the writer cannot agree. It is a building which looks near while yet it is felt to be far away. There is no need to pick out a detail and to think how big it is before the whole magnitude can be felt, as is the case in certain famous pseudo-classical constructions. As one emerged from the doors of the main Exposition building last summer, eight hundred yards away, the distant palace at once took the eye and held it, as does a mountain seen every day from the village streets, familiar in all its details, plain to be seen, right upon us—and yet felt to be huge and far away. There are weak things about



BRONZE GROUP, "GRATITUDE," FROM THE SCHNEIDER MONUMENT, BY CHAPU.

it: the great twelve-sided roof is of dark-gray slate and is at once gloomy and weak; the tower roofs are of copper with gilded ribs, and the wing colonnades are covered with red tiles (what a pity that the center could not have been roofed in one of these two ways!). This central roof is stiff and weak, and carries a wretched little lantern, the whole crowned with a statue, which, however fine in reality,—and it is by a most worthy and excellent sculptor, M. Mercié,—is almost invisible from below, and has no sort of effect on the general design. Then,

as regards details—well, it is in detail that the architects of the Paris school fail. They are taught to plan wonderfully well, and to make their exterior show the interior disposition and follow it, and the best of them soon shake off whatever of academic tradition may have been calculated to restrain their powers of design. But to combine sculptured and painted details, lovely in themselves, so as to make a noble building nobler and more graceful by their use, is not the special gift of the Paris-trained architects. With the best sculptors in the world,

—and indeed the only living school of sculpture,—they have no carved ornament for their buildings which is worthy of serious consideration; they have forgotten how to use moldings; and the tendency seems to be toward plain square jambs and flat

stripes of buff and pale-red limestone, and the friezes under the cornices decorated with patterns in mosaic, in gold and pale blue and white, with pale red terra cotta; but it still lacks ornament. The angles of window and door, and buttress and pier, are all too



STATUE, "CHARITY," BY PAUL DUBOIS, FROM THE MONUMENT TO GENERAL DE LA MORICÈRE.

façades of little decorative effect, with life-size and colossal statues in full realized sculpture set up against them as their chief and almost their sole decoration. Now, the Trocadéro Palace is not so bad as that, for it has some contrast of color, the material of the walls being arranged in alternate

hard, the spectator seems to knock his head against them; the immense windows are cut too squarely through the walls, and lack the penumbra of delicately molded or carved archivolts and imposts; the building looks as if an army of skillful stone-carvers should be turned loose upon it, to soften it into

greater harmony and to bring about a more gentle transition between its lesser subdivisions. These are faults common to modern buildings, and come of the lack of trained workmen (trained, that is, in artistic ways), of the great cost of labor, of haste and indifference, and of the contract system of building; in so far as the Trocadéro Palace was kept free from any of these evils, their absence was made up by the peculiarly severe pressure of haste, for the building was not started until late in the autumn of 1876, and was finished complete in eighteen months, including two winters; and this, although there were peculiar difficulties in the way, as the ground was found to be perfectly honey-combed with ancient quarries, and the new foundations had to be begun deep down in the seemingly solid hill.

These old quarries are found in all the suburbs of Paris. When the great church of the Sacred Heart was devised, nine years ago, to stand upon the heights of Montmartre, and to serve, in a way, as the church's manifesto in rivalry of the new opera-house and the world, the hill was found to be in even greater need of complete rebuilding than the hill-side of Chaillot. But in the Trocadéro Park there is, at all events, one very interesting result of the cavernous condition of this part of the world—the aquarium, shown on the plan by an irregular bounding line. This feature is cleverly arranged in a number of the old quarry-holes. The visitor steps about among a series of little ponds, so arranged, each a little higher than its neighbor, that the water slowly runs from one to another. These ponds are open to the sun, like any piece of natural water; but by going down some rough stone steps and into the bowels of the hill, the visitor finds himself among the fish and on their own level, separated from the water only by plate-glass on either side, behind, before, and even overhead.

All this park of the Trocadéro is sloping ground, all leading up from the bridge to the great palace. In the middle, and springing from the rotunda of the music-hall itself, as seen in our illustration on page 163, is the cascade, which, after the manner of such ornamental waters, descends the hill by little steps, after it has taken its first great plunge of thirty feet or more. It is admitted that the slope of the cascade is not quite steep enough; that, when looked at from below, it does not fall rapidly enough for the best effect; that it is too much lost in

the foreshortening. But the basin in which it ends its course is very successful, with its three fountains, the center one playing always in a slender upright jet, the two side ones in "bouquets" of spray. At the four corners of the basin are four statues of singular subject, which have excited as much remark and criticism as any sculptured work about the Exposition. They face out from the water in four different directions, four enormous quadrupeds of gilded bronze: a horse and an ox, an elephant and a rhinoceros. A very remarkable success has been achieved in these. Mr. Cain's ox is especially admirable. As for Mr. Jacquemart's rhinoceros, the wonder is so great that he should succeed in doing anything at all with the creature, as a subject for sculpture, that perhaps one's critical humor is lulled asleep; but indeed the modeling is capital, at once artistic and faithful to the minute peculiarities of the beast, and the treatment, in a decorative fashion, is truly surprising.

The buildings nearest this basin, one on each side, are two of the more elegant and expensive of the numerous restaurants within the grounds. From that on the right a charming view is to be had, almost like the view from the colonnade of the palace, though of course less extensive. This was the place to dine during that memorable summer! At six the buildings were closed; but the grounds were lighted more or less brilliantly, and they were open till eight o'clock for in-comers, and indefinitely for lingerers; at least, the restaurants began to shut up and the attractions grew strong elsewhere, before ever any notice of dismissal was served upon the loitering visitor. At six one could dine pleasantly,—for there was no crowd, except at the hour of *déjeuner*,—and then take a comfortable chair under the colonnade which crowns the hill, and watch the sunset light upon the distant domes and towers, the gleaming river, and the Exposition building across the river, with its four bubble-like domes at the four corners, and the long perspective of roofs between.

In this respect the buildings of 1878 were vastly superior to the oval mass of 1876; for the great size of the whole group was perfectly evident; the domes nearest the "École Militaire" looked to be, as they were, half a mile farther off than the nearer ones; and the transparent lightness given to these square domes by their way of construction (which may be partly understood by examining the cut on page 166), greatly aided



STATUE "JEANNE D'ARC AS A CHILD," BY ALBERT-LEFEUVRE.

the effect of the whole, making it all seem vague and vast in the dim light. In the *Parc de Jéna* there was a little government

building,—shown on the right hand of the map, and lettered M. P. W., which stands for Minister (or Ministry) of Public Works,—



ANCIENT TAPESTRY, FROM THE FRENCH SCULPTURE GALLERY. (AFTER DRAWING BY D. MAITLAND ARMSTRONG.)

and on the top of it was a little light-house, or lantern, from which a revolving light, now white and now red, threw its flashes through the gathering night. In one other respect, also, the prospect grew more pleasing as darkness descended: the buildings which are seen on the map standing along the river-side, between the river and the "sunken street" on each bank, were nearly all roofed with red tiles, and in broad daylight the succession of these roofs of vivid color, one rising behind the other, divided the landscape too violently, while they concealed too much of it. That was a serious oversight, and the worst blot upon the general beauty of the grounds.

The lower part of the slope, on this side the river, was thickly strewn with buildings; that farthest to the left is the Chinese bazaar, with ornamental gardens around it;

the larger block of buildings near, fronting on the cross-avenue, which continues the Boulevard De Lessert, is the Egyptian building; behind it, down the hill, are wooden structures put up by Swedish and Norwegian exhibitors; and fronting on the main avenue that leads to the bridge, is the Japanese model farm. Of this last, the house is not so important as the very pretty cottage put up by the Japanese at Philadelphia, but the pretty garden, the delicate fences, the ornamental plants and the general arrangements were very attractive; and the gate was so picturesque and so prettily ornamented with carvings in wood that it was one of the most valuable pieces of ornamental art in the Exposition. The most important building on the eastern side of this park is the Algerian pavilion, the white tower of which is prominent in



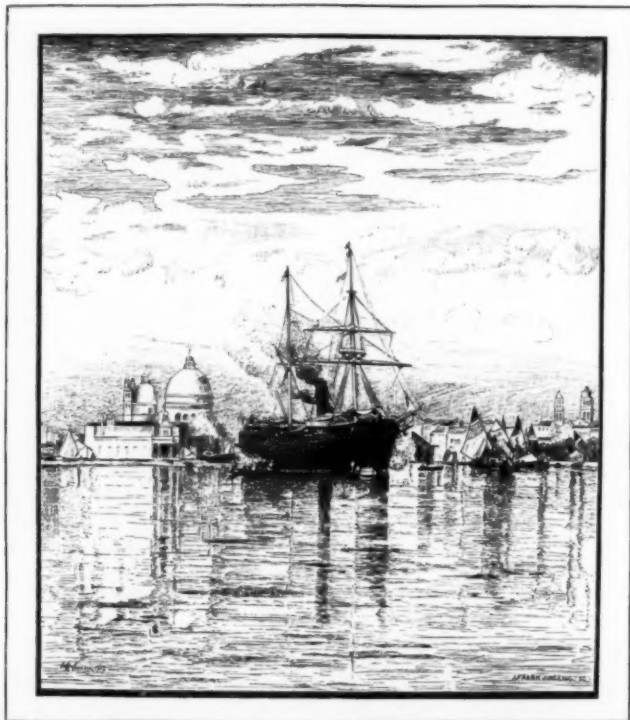
STATUE, "FAITH," BY PAUL DUBOIS, FROM THE MONUMENT TO GENERAL DE LA MORICIÈRE.
(FROM DRAWING BY AUGUSTUS ST. GAUDENS.)

every view of the Exposition grounds or of Paris from the Trocadéro. This is the large oblong structure close to the Rue de Magdebourg, and between gates C and D.

An important structure is the Creuzot building near the Pavilion of Public Works—important on account of the great industry it represented, with the evidences of which it was

filled, on account of its own considerable value as an architectural design, and on account of the very interesting monument it contained. In the cut on page 168 is engraved a part of

wooden *sabots* and rough clothes. The truly artistic management of all this, and the pathos and sincerity which fill it, are the more delightful because they are unexpected.



"VENICE, PAST AND PRESENT." (DRAWN BY C. C. COLEMAN AFTER HIS PAINTING IN THE EXPOSITION.)

this monument which is erected to the memory of Eugène Schneider, the founder and chief the iron-works at Creuzot, and head for so long a time of an unusually prosperous and contented community. At the base, seated on a projecting step which serves her as a seat, is a mother pointing to the statue of Schneider at the top, and calling her son's attention to it as the object of his gratitude and imitation. This group is one of the most real and valuable products of modern art. The dress of both the mother and the boy is that of the work-people of the Schneider *usine*; advantage is taken of the habits of workers in the casting-shops and forges to give the boy's body naked above the waist, and to model carefully its spare and youthful forms; but except for this, the sculptor's only material after he leaves the two characteristic and expressive heads, are coarse shoes,

However learned and skillful, however valued by the French official and municipal leaders for its monumental and grandiose character, M. Chapu's work generally lacks freshness and native impulse,—is too often but cold and dull. There are many large and stately works by this sculptor in and about the great Exhibition building, and they all repel. If we turn away from the Creuzot pavilion and look across the lawn and the lake toward the central entrance of the grand vestibule, there, on the steps leading to the terrace, was a colossal seated female figure—"The French Republic"—gazing out toward the park and the bridge. Within, and under the side *loggia* of the Paris pavilion, was the monument to Berryer, the great advocate, intended for the Palace of Justice, which is now being repaired and rebuilt after the incendiarism of 1871. These

and six or seven important works that were in the galleries leave the spectator cold and indifferent, and, until he learns to understand and feel the strong desire of the French for stateliness of effect in connection with monumental sculpture, he is inclined to wonder at the immense fame and success of the sculptor. But this group of the Creuzot monument, known as "Gratitude,"—"La Reconnaissance,"—has modern feeling as well as great artistic qualities, and is a true work of the time.

The view on page 166 just misses giving the statue of the Republic, mentioned above, and shows the extreme western angle of the main Exhibition building. The glass wall is the front of the Grand Vestibule, as we may readily consent to call this really immense hall; a broad terrace is before it, and a projecting roof shelters the numerous entrances. The statues ranged along below this roof are emblematic of the nations who joined in the Exposition, and high above each statue, on the top of the pier against which it is set, was a shield bearing some heraldic or other device also appropriate to its nationality. There was not much value in these statues; Mr. Aizelin's "Japan" received the most general admiration, but they were all together of small importance,—at least in comparison with the works of art around. For entering the vestibule, say by the middle door-way,

beyond. Out of the grand vestibule, door-ways opened to the long corridors of the building beyond;—a door-way in the middle to the art galleries, on each side of this a door to one of the open streets, and again beyond these, on each side, door-ways to the different departments—all that was French on the north-east, or Paris side, all that was foreign on the other. But the fine-art galleries are not divided in this way, but follow one another in long sequence, as shown in the plan on page 165. Since the first three rooms are filled with French sculpture, it was the more suitable that some of the more prominent pieces should stand without.

Among the four or five hundred statues, groups and busts, the bass-reliefs and medals, the monumental compositions of the French sculptors, how few can we even name! The lovely statue, by Mr. Albert-Lefevre, of Jeanne d'Arc in her childhood, stood in the large, square sculpture gallery,—the first as you pass from the vestibule,—and was on the right, just at the right-hand jamb of the door leading into the long gallery beyond. The full title is "Jeanne d'Arc, enfant, entend 'ses voix.'" The cut, taken from a photograph, does not give the best point of view; but yet the meaning of the statue can be seen and understood. What cannot be seen is its sculptresque beauty. It was the only work in the Exposition of an artist who is

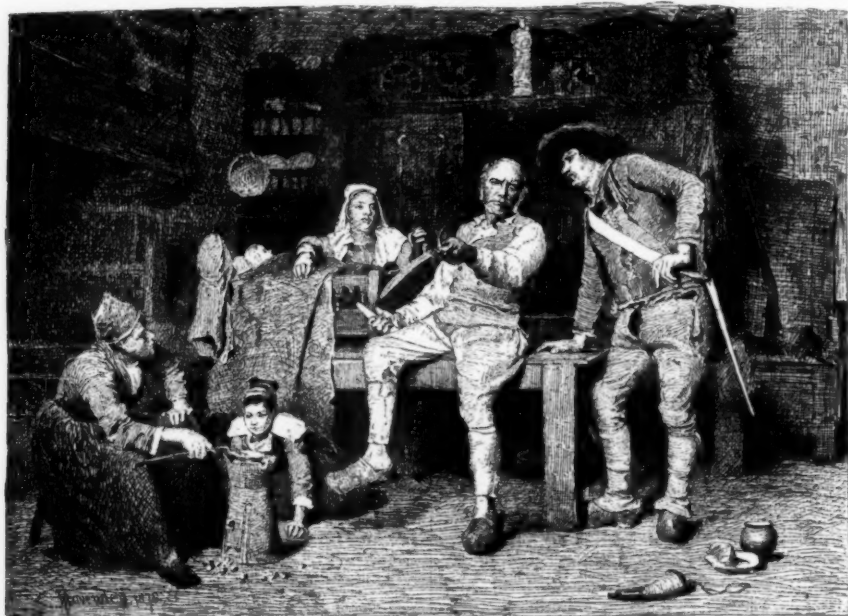


"THE APPROACH TO VENICE." (PAINTING BY W. G. BUNCE.)

the visitor found an assembly of statues and groups in marble and in bronze, which, without crowding the immense space, or seeming to interfere with free passage, welcomed the visitor to the display of fine art

still very young, and whose promise is of surpassing excellence.

The average merit is so high that it is hard for one accustomed to other modern sculpture than that of France to form any concep-



"BRETON INTERIOR IN 1793." (DRAWN BY T. HOVENDEN AFTER HIS PAINTING IN THE EXPOSITION.)

tion of it. As an instance we may mention the extraordinary vigor of the great number of portrait-heads (for they are hardly "busts," having little more than the head and throat, to the breast). There were, perhaps, seventy-five of them in the long rooms coming second and third in our diagram, and scarcely one was inferior to, or less worthy of study and admiration than, the others. It is not wonderful, of course, that of all the thousands of works of sculpture of the past eleven years, the selected five hundred should have been fine. Every year the *salon* contains six hundred, so that the commissioners had at least six thousand to choose from. It is in its abundance and richness that the glory of the French school of sculpture lies. The ample encouragement given to sculptors by the government and by the cities and public bodies, has counted for much, and it is the custom in France to be magnificent in sculpture, as well as in painting. The result is that there is an immense amount produced which is of a certain value, and among it all some little which reminds the student of great times gone by. The question that one asks, on first surveying this immense body of art, is whether any of it is admirable artistically,—admirable in modeling, admirable

as a work of sculpture. "Never mind about the meaning of it!" the enthusiast is almost ready to cry. "The young women at home are producing statues which are wonderfully full of meaning; but are there any of these which are beautiful? Grecian perfection I do not ask nor expect," he says, if he is reasonable; "but is there anybody alive that can give some of that antique grace, that modulation of surface, that subtle gradation of form, which lasted long after the glory of Greece was past, and which makes the sculpture, even of what we call corrupt and decaying epochs, a despair to modern men?"

Well, there was something to show the enthusiast. Outside of the line of galleries, on the French side, the open street was called the Rue de France, and passing down that street toward the center of the main building, the visitor found something in a recess between two of the alcoves which showed what modern sculpture can achieve. In our diagram (page 165) it is shown at C, in the last recess before we reach the first *loggia*, or cross-passage. It is the tomb of General Juchault de La Moricière, with its statues by M. Paul Dubois, set up for the first time and intended, when made perfect by the

completion in bronze of all the statues at the angles, to stand in the cathedral of Nantes. As it stood in the Exposition, the statue, or rather group of "Charity," and the statue of "Military Courage," which were exhibited as plasters in the Salon of 1876, were in dark bronze, but the other two supporters, "Faith" and "Meditation," were in the plaster still. Of these we give engravings of "Charity" and

among the few finest things of modern art. Military Courage gives name to a noble statue, too, of which photographs and Barbedienne's bronze reproductions in small can be had. The monument itself with the four statues at the four angles, and the recumbent statue of the general beneath the canopy, is altogether, architecture and sculpture, a very admirable piece of work, and no doubt in



"LA FONTAINE." (PAINTING BY JULES BRETON.)

"Faith," the first from a photograph which was taken from the plaster original; the other from a drawing by Mr. St. Gaudens, made from the statue during the Exposition. With their tranquillity, their perfectly sculpturesque design, the simple and delicate treatment of dress and accessories, and their refined modeling, as of a great sculptor of the Renaissance come again, but with newly gained anatomical science, these statues are

time to come casts and models of it will be set up in our museums.

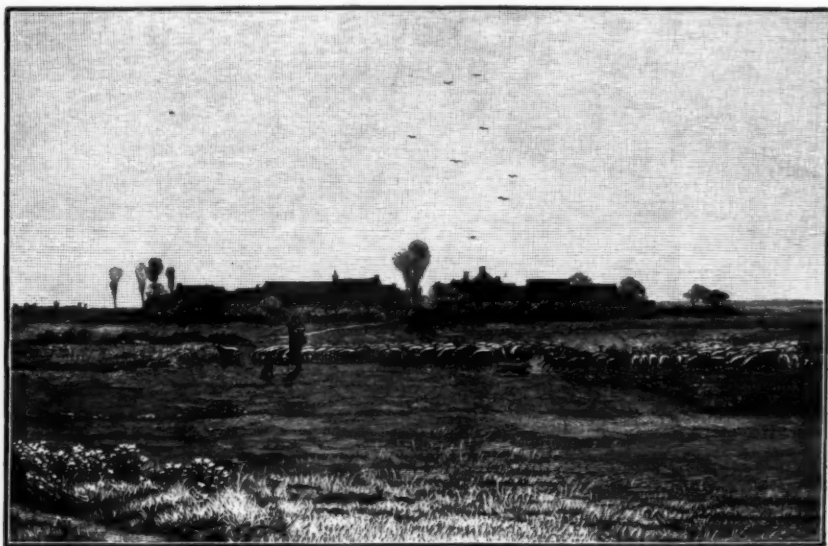
Before leaving the French sculpture galleries, mention should be made of the very sensible plan adopted for masking the nakedness of the walls. They are almost covered with large ancient tapestries, many of them of great beauty. No catalogue nor handbook mentioned them, except casually; no labels were appended to them; to whom they

belonged and whence they came there was no one to say. One of them is reproduced in the engraving on page 172, from a drawing made during the Exposition by Mr. D. Maitland Armstrong.

In our diagram of the galleries (page 165), the recesses between the alcoves are in some cases marked by letters. A is nothing of consequence, a big terra cotta reproduction of the Diana of the Louvre, a specimen of Doulton's Lambeth pottery. B is better; it is a very spirited bronze group by J. E. Boehm, "A Clydesdale Stallion," and his groom. Mr. Boehm is also the author of the large statue of Thomas Carlyle which has been often copied and photographed. But the most important piece of sculpture in the British exhibit is, without doubt, the "Athlete Struggling with a Python," of Sir Frederick Leighton, the painter. This stands in the large room of the British subdivision, among the pictures. Indeed, with the exception of France, no nation separates statuary from painting,—not even those who, like Italy, send a large collection of each.

The compact little gallery occupied by the United States contained much that was really interesting and worthy to be on exhibition in Paris, even among the pick of the last ten years of European art. Mr. Vedder's "Marsyas," engraved from his own drawing, is believed to be a good deal more faithful

to the original picture, and more beautiful as an engraving, than the illustration in "L'Art" which the writer in that journal oddly praised at Mr. Vedder's expense. Mr. Kreuzberger is credited with the drawing of that picture, which, reproduced by some one of the numerous processes of photo-engraving, now so common, appears in the fifteenth volume of "L'Art," page 199. This would have passed as a tolerable print and tolerably like the picture, but for the amazing statements of the accompanying text, in which it is said that the copyist "has amused himself with putting into shape the picturesque dreams of Mr. Vedder," and that "perhaps this may be profitable to Mr. Vedder himself, whose notice will, in this way, be called to certain deficiencies in his talent." The moral aspect of that criticism has been treated of in many journals; our business has been rather to give a really adequate idea of the picture, by obtaining Mr. Vedder's own drawing, and having it engraved by Mr. Cole. Mr. Coleman's "Venice, Past and Present" also is engraved from a drawing by himself. It needs little power of imagination to see the artist's meaning in the trim steamer anchored off the custom-house, while on one side of her are the painted sails of the Venice fishing-boats, and on the left the old Dogana and the Church of the Madonna of Salvation. Mr. Hoven-



"STUBBLE FIELDS." (PAINTING BY A. SEGÉ.)

den's "Breton Interior in 1793" was drawn by himself from the painting, while Mr. Bunce's "The Approach to Venice" was engraved from a photograph.

The other paintings which we have engraved are all from the French contributions. M. Segé's landscape, "Les Chaumes (Eure-et-Loire)," is one of the best pictures of the younger men, who are building up in France a wonderful school of strong and free landscape-painting. M. Protais' "Color Guard" is one of the very few pictures of military subject which were in the Exposition. All the works of art which in any way reflected recent animosities or recorded recent strife were barred; the motto of the Exposition, placed high above its principal front, was "Peace." M. Protais' picture, as fitting any time and place, with a few others, such as M. Berne-Bellecour's "Cannon Shot" (*Un Coup de Canon*), pictures by Meissonnier and others of the soldiers of the First Empire were among the military pieces admitted. As one goes out of the United States gallery into the first French picture-gallery, the wall on the left was half filled with the paintings of Jules Breton, and a noble show they made. What a pity it is that it is not yet possible, in any of our picture-galleries, to get the works of an artist all grouped together! The childish fancy for variety, which had rather see each wall covered with as varied a collection as possible, is exactly equivalent to that stage of intellectual development which reads poetry in books of selections; it is about time that the hanging committees ceased to regard it. Not that the Bretons were all absolutely together. One had to find some strayed canvases, besides. The one we have engraved from a photograph is perhaps as valuable a picture as any, nor was there in the collection anything much finer in the way of free and noble rendering of peasant life and rural landscape. It is always true of Mr. Breton's peasant girls that they are peasants indeed, and not Parisian models in peasant dress. This gives to all his work of this class a character of truthfulness and real life, the reason for which is not at first easy to understand.



PART OF THE BELGIAN FAÇADE.

And this is one of the chief causes of a reputation which is just a little surprising. For the artistic quality of these pictures, though high, is certainly not the highest; there is little or none of that strange dignity of which Jean François Millet had the secret. It would not do to say that it is to despised and decried *realisme* that Jules Breton owes his power over the spectator; and yet, where else to seek for it? At the same time, it must be said that among his pictures there are some which remind one of the great Millet. The picture, "Les Amis," where girlish figures—not, as in "La Fontaine," of life size, but much smaller—are seen coming through the corn-field, is perhaps, of all



INTERIOR OF AN ENGLISH COUNTRY HOUSE, TIME OF WILLIAM III.; ENGLISH EXHIBIT.

these nine pictures, the most noble and severe, the best in every way, and the most like the work of the dead artist whom we have twice named.

Opposite the Bretons, on the other long wall of that gallery, hung M. Bouguereau's canvases—a very different collection! It seems to be priestly influence that gives him so much valuable space for his saintly personages, with broad, gilded haloes. His rather effeminate art has but two notes: pietism and girlish sentiment; and, compared with the daylight sensibleness of the Bretons, it is all feeble indeed. When the visitor looked back toward the screen, around which he had passed in entering, he found it covered with the pictures of Corot—ten Corots together! This was an afterthought; the Exposition was two months old before these Corots were hung, there having been only two or three at first. What bad management it was, or what willful exclusion, which kept out Millet entirely, and almost succeeded in excluding Corot, it is impossible to

say, though there was gossip enough about it. The corresponding screen in the gallery alongside (the one opening out of "Sweden") was hung with the paintings of the elder Daubigny; and near, on the wall dividing the two French galleries, the pictures of Carolus Duran, including the "Mlle. Croizette" of the Philadelphia Exhibition. But it is impossible to go on in this catalogue style, hinting at pictures which we cannot engrave, nor describe, nor, alas! see again. In the galleries beyond was the wonderful work of the Alsacian, Henner, and of Laurens, the most truly historical and the most truly a painter, of all living historical painters; and here, too, the work of Benjamin Constant, who perhaps will surpass him, as having certainly greater art-power. It is hard to imagine anything more magnificent than M. Constant's huge picture of the fall of Constantinople,—magnificent in a worldly, too visible, superficial way, perhaps; but noble still, as a huge earthly event itself is noble. Then there were the strong and

sincere young landscape-painters, of whom M. Segé only has been named. With him should always be classed L. G. Pelouse and the Burgundian Pointelin, Bernier of Colmar, and the younger Daubigny. And, among all the pictures of younger and older men alike, the marvelous workmanship and powerful conception of Bastien-Lepage—a new man, whose first medal was only of 1874

for the front upon this of the French buildings on the north-east was a blank wall of iron and glass, and the picture-galleries and alcoves were not ornamental. But the other street was a different affair. It was called "Rue des Nations," and each visiting people had a front upon it exactly proportionate to the size of the ground it occupied. Thus, Great Britain had some five hundred feet of

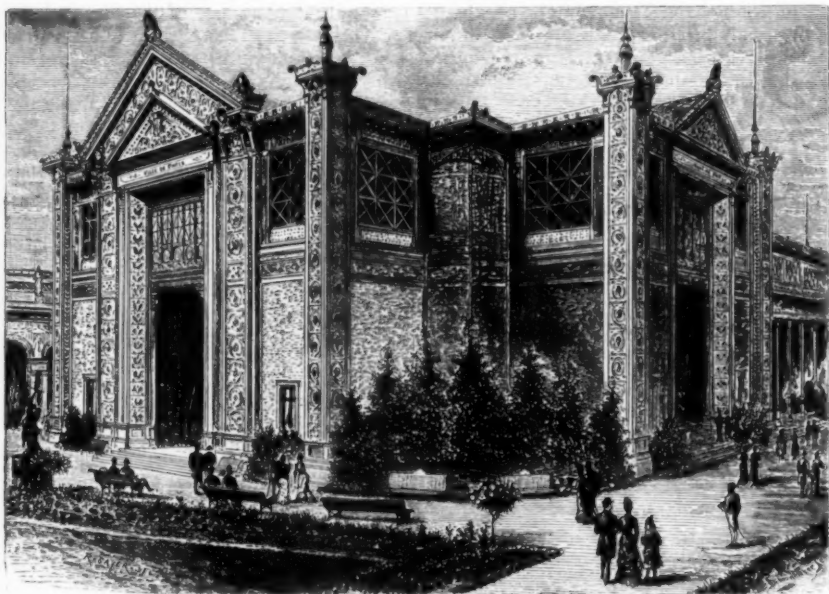


"THE COLOR GUARD." (PAINTING BY PROTAIS.)

—drew the lovers of vigorous and independent art to the out-of-the-way corner where his best canvas was hung. In despite of this attractive panorama, and instead of passing on to the galleries beyond the center, our business is to stop for a moment at the first *loggia*, and look about us.

The open street on the Paris side was, as has been said, the Rue de France. And this is a plain, and even ugly, street enough,

frontage; and the next largest exhibitors being Austria-Hungary and Belgium, it was they who came next in the amount of space occupied on the street. These fronts were all occupied with the "façades," of which so much has been written. Each nation did as it chose; and very oddly they chose, some of them! The chief and most honorable building was that of Belgium. The Belgians took the suggestion *au grand sérieux*, and spent six hun-



THE PAVILION OF PARIS.

dred thousand francs, and built a building like a Renaissance town-hall, of one pavilion of which we give a picture. The architect of this building, M. Janlet, showed great ingenuity in working into his design the various building materials which were contributed,—polished marble and granite columns, stone of various colors, brick, bronze-work, wrought-iron work,—and all without clashing or want of harmony.

The five hundred feet of front occupied by Great Britain was filled, not by one "façade," but by five separate buildings, one of which was built and fitted up as a private residence for the president of the British Commission, the Prince of Wales. The most satisfactory of the five was the little edifice erected by Messrs. Collinson & Lock, a London firm of decorators and upholsterers. It was a faithful reproduction of a small country house of the time of William III., and represented in its simple and careful design, both within and without, an unusual degree of skill, knowledge and taste. Our cut, from a drawing by Mr. D. Maitland Armstrong, gives the interior, at the archway between the entrance vestibule and the stair-way hall.

But in the heart of the huge structure

(where a park was to have been had not space, even in this most vast of exhibition buildings, proved scanty) was the best building on the Champ de Mars, the really beautiful pavilion of the city of Paris. This building, devoted to the exhibition of the city itself, in its corporate capacity, with its various departments of religion and education and police, lighting and paving, parks and public monuments, is really very large—about two hundred and fifty feet long. Our cut shows the south-eastern end of it; or, rather, the easternmost corner, with two of the six great door-ways; and on the right, a part of the covered veranda where statuary and monuments belonging to the city were exhibited; on the left, just seen, is an arch of the Austrian Façade on the Rue des Nations; the street on the right is the Rue de France. Space does not allow of a minute examination of this edifice, which in some respects is the most important in the Exposition, and which marks an era in modern building: a purely constructional work, built and decorated by the means readiest to hand; absolutely novel, and undervalued; free from the copyism which ruins modern architecture, and altogether a marked success as an architectural design.

"HAWORTH'S." *

BY FRANCES HODGSON BURNETT,

Author of "That Lass o' Lowrie's," "Surly Tim, and Other Stories," Etc.



"SHE STROKED HIS SLEEVE WITH HER WITHERED HAND."

CHAPTER XXXVIII.

"GOD BLESS YOU!"

LATE the same night, Mrs. Haworth, who had been watching for her son alone in the grand, desolate room in which it was her lot to sit, rose to her feet on hearing him enter the house.

The first object which met his eye when he came in was her little figure and her patient face turned toward the door. As he crossed the threshold, she took a few steps as if to meet him, and then stopped.

"Jem!" she exclaimed. "Jem!"

Her voice was tremulous and her eyes bright with the indefinable feeling which seized upon her the moment she saw his face. Her utterance of his name was a cry of anxiousness and fear.

"What!" he said. "Are you here yet?"

He came to her and laid a hand upon her shoulder in a rough caress.

"You'd better go to bed," he said to her. "It's late and I've got work to do."

"I felt," she answered, "as if I'd like to wait an' see you. I knowed I should sleep better for it—I always do."

There was a moment's pause in which she stroked his sleeve with her withered hand. Then he spoke.

"Sleep better!" he said. "That's a queer notion. You've got queer fancies, you women—some on you."

Then he stooped and kissed her awkwardly. He always did it with more or less awkwardness and lack of ease, but it never failed to make her happy.

"Now you've done it," he said. "You'd better go, old lady, and leave me to finish what I've got to do."

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"It's late for work, Jem," she answered. "You oughtn't to try yourself so much."

"It aint work so much," he said, "as thinking. There's summat I've got to think out."

For the moment he seemed quite to forget her. He stood with his hands thrust into his pockets and his feet apart, staring at the carpet. He did not stir when she

He bestirred himself and looked up at her.

"Trouble!" he repeated. "That's not the word. It's not trouble, old lady, and it's naught that can be helped. There's me and it to fight it out. Go and get your sleep and leave us to it."

She went slowly and sadly. She always obeyed him, whatever his wish might be.



"SHE TURNED HER FACE TOWARD HIM. 'GOOD-NIGHT,' SHE ANSWERED."

moved away, and was still standing so when she turned at the door to look at him.

What she saw brought her back, hurried and tearful.

"Let me stay!" she cried. "Let me stay. There's trouble in your face, Jem, for I see it. Don't keep it from me—for the sake of what we've been through together in times that's past."

When the last sound of her faltering feet had died away upon the stairs, he went to the side-board and poured out a glass of raw brandy and drank it.

"I want summat to steady me," he said,—"and to warm me."

But it did not steady him, at least. When he sat down at the table, the hand he laid upon it shook.

He looked at it curiously, clinching and unclenching it.

"I'm pretty well done for when it goes like that," he said. "I'm farther gone than I thought. It's all over me—over and through me. I'm shaking like a fool."

He broke out with a torrent of curses.

"Is it me that's sitting here," he cried, "or some other chap? Is it me that luck's gone agen on every side or a chap that's useder to it?"

Among all his pangs of humiliation and baffled passion there was not one so subtle and terrible in its influence upon him as his momentary sense of physical weakness. He understood it less than all the rest, and raged against it more. His body had never failed him once, and now for the first time he felt that its power faltered. He was faint and cold and trembled not merely from excitement but from loss of strength.

Opposite to him, at the other side of the room, was a full-length mirror. Accidentally raising his eyes toward it he caught sight of his own face. He started back and unconsciously glanced behind him.

"Who——!" he began.

And then he stopped, knowing the face for his own—white-lipped, damp with cold sweat, lined with harsh furrows—evil to see. He got up, shaking his fist at it, crying out through his shut teeth.

"Blast her!" he said. "Who's to blame but her?"

He had given up all for her, his ambition, which had swept all before it, his greatest strength, his very sins and coarseness, and half an hour ago he had passed the open door of a room and had seen Murdoch standing motionless, not uttering a word, but with his face fairly transfigured by his ecstasy, and with her hand crushed against his breast.

He had gone in to see Ffrench, and had remained with him for an hour in one of the parlors, knowing that the two were alone in the other. He had heard their voices now and then, and had known that once they went out upon the terrace and talked there. He had grown burning hot and deadly cold, and had strained his ears for every sound and never caught more than a word or low laugh coming from Rachel Ffrench. At last he had left his partner, and on his way out had passed the open door. They had come back to the room, and Murdoch was saying his good-night. He held Rachel Ffrench's hand, and she made no effort to withdraw it, but

gave it to his caress. She did not move nor speak, but her eyes rested upon his rapt face with an expression not easy to understand. Haworth did not understand it, but the rage which seized and shook him was the most brutal emotion he had ever felt in his life. It was a madness which left him weak. He staggered down the stairs and out into the night blindly, blaspheming as he went. He did not know how he reached home. The sight his mother had seen, and which had drawn a cry from her and checked her midway in the room had been cause enough for tremor in her. Nothing but the most violent effort had saved him from an outbreak in her presence. He was weaker for the struggle when she was gone.

He could think of nothing but of Rachel Ffrench's untranslatable face and of Murdoch's close clasp of her surrendered hand.

"What has she ever give me?" he cried. "*Me*, that's played the fool for her! What's he done that he should stand there and fondle her as if he'd bought and paid for her? I'm the chap that paid for her! She's mine, body and soul, by George, if every man had his rights!"

And then, remembering all that had gone by, he turned from hot to cold again.

"I've stood up agen her a long time," he said, "and what have I got? I swore I'd make my way with her, and how far have I gone? She's never give me a word, by George, or a look that'd be what another woman would have give. She's not even played with me—most on 'em would have done that—but she's not. She's gone on her way and let me go on mine. She's turned neither right nor left for me—I wasn't man enough."

He wore himself out in the end and went to the brandy again, and drank of it deeply. It sent him up-stairs with heated blood and feverish brain. It was after midnight, and he went to his room, but not to sleep. He lay upon his pillow in the darkness thinking of the things he had done in the past few months, and of the fruit the first seed he had sown might bring forth.

"There's things that may happen to any on us, my lad," he said, "and some on 'em might happen to you. If it's Jem Haworth that's to lose, the other sha'n't gain, by George!"

He had put the light out and lay in the darkness, and was so lying with this mood at work upon him when there came a timid summons on the door, and it opened and some one came in softly.

He knew who it was, even before she spoke.

"Jem," she said, "Jem, you're not asleep, my dear."

"No," he answered.

She came to the bed-side and stood there.

"I—I couldn't sleep," she said. "Something's a little wrong with me. I'm gettin' foolish, an'—an' fearful. I felt as if you wasn't quite safe. I thought I'd come and speak to you."

"You're out o' sorts," he answered. "You'll have to be looked after."

"It's nothing but my foolish way," she replied. "You're very good to me—an' me so full of fancies. Would you—would you mind me a-kneelin' down an' sayin' a prayer here to myself as I used to when you was a boy, Jem? I think it 'd do me good. Would you mind it?"

"No," he answered hoarsely. "Kneel down."

And she knelt and grasped for his hand and held it, and he heard her whispering in the dark as he had been wont to hear her nearly thirty years before.

And when it was over, she got up and kissed him on the forehead.

"God bless you, my dear!" she said. "God bless you!" and went away.

CHAPTER XXXIX.

"IT IS DONE WITH."

AFTER the departure of Haworth and Murdoch, Mr. Ffrench waited for some time for his daughter's appearance. He picked up a pamphlet and turned over its leaves uneasily, trying to read here and there, and making no great success of the effort. He was in a disturbed and nervous mood, the evening had been a trial to him, more especially the latter part of it during which Haworth had sat on the other side of the table in his usual awkwardly free and easy posture, his hands in his pockets, his feet thrust out before him. His silence and the expression he had worn had not been of a kind to relieve his companion of any tithe of the burden which had gradually accumulated upon his not too muscular shoulders. At the outset Ffrench had been simply bewildered, then somewhat anxious and annoyed, but to-day he had been stunned. Haworth's departure was an immense relief to him, in fact, it was often a relief to him in these days. Then he had heard Murdoch descend the stairs and leave the house and he waited with mingled dread and anxious-

ness for Rachel's coming. But she did not make her appearance. He heard her walk across the room after Murdoch left her, and then she did not seem to move again.

After the lapse of half an hour he laid his pamphlet aside and rose himself. He coughed two or three times and paced the floor a little—gradually he edged toward the folding doors leading into the front room and passed through them.

Rachel stood at one of the windows, which was thrown open. She was leaning against its side and looking out into the night. When she turned toward him something in her manner caused in Ffrench an increase of nervousness amounting to irritation.

"You wish to say something to me," she remarked. "What is it?"

"Yes," he answered. "I wish to say something to you."

He could not make up his mind to say it for a moment or so. He found himself returning her undisturbed glance with an excited and bewildered one.

"I—the fact is"—he broke forth, desperately, "I—I do not understand you."

"That is not at all singular," she replied. "You have often said so before."

He began to lose his temper and to walk about the room.

"You have often chosen to seem incomprehensible," he said, "but *this* is the most extraordinary thing you have done yet. You—you must know that it looks very bad—that people are discussing you openly—you of all women!"

Suddenly he wheeled about and stopped, staring at her with more uncertainty and bewilderment than ever.

"I ought to know you better," he said, "I do know you better than to think you capable of any weakness of—of that kind. You are *not* capable of it. You are too proud and too fond of yourself, and yet"—

"And yet what?" she demanded, in a peculiar, low voice.

He faltered visibly.

"And yet you are permitting yourself to—to be talked over and—misunderstood."

"Do you think," she asked, in the same voice, "that I care for being 'talked over?'"

"You would care if you knew what is said," he responded. "You do not know."

"I can guess," she replied, "easily."

But she was deadly pale and he saw it, and her humiliation was that she *knew* he saw it.

"What you do," he continued, "is of more consequence than what most women do. You are not popular. You have held yourself very high and have set people at defiance. If you should be guilty of a romantic folly, it would go harder with you than with others."

"I know that," she answered him, "far better than you do."

She held herself quite erect and kept her eyes steadily upon him.

"What is the romantic folly?" she put it to him.

He could not have put it into words just then if his life had depended upon his power to do it.

"You will not commit it," he said. "It is not in you to do it, but you have put yourself in a false position, and it is very unpleasant for both of us."

She stopped him.

"You are very much afraid of speaking plainly," she said. "Be more definite."

He actually flushed to the roots of his hair in his confusion and uneasiness. There was no way out of the difficulty.

"You have adopted such a manner with the world generally," he floundered, "that a concession from you means a great deal. You—you have been making extraordinary concessions. It is easy to see that this young fellow is madly enamored of you. He does not know how to conceal it, and he does not try. You have not seemed to demand that he should. You have let him follow you, and come and go as his passion and simplicity prompted him. One might say you had encouraged him—though encouraged seems hardly the word to use."

"No," she interrupted, "it is not the word to use."

"He has made himself conspicuous and you too, and you have never protested by word or deed. When he was in danger you actually risked your life for him."

"Great heaven!" she ejaculated.

The memory of the truth of what he had said came upon her like a flash. Until this moment she had only seen the night from one stand-point, and to see it from this one was a deadly blow to her. She lost her balance.

"How dare you?" she cried breathlessly. "I was mad with excitement. If I had stopped to think——"

"You usually do stop to think," he put in. "That was why I was amazed. You did a thing without calculating its significance. You never did so before in your

life. You know that it is true. You pride yourself upon it."

He could have said nothing so bitter and terrible. For the moment they had changed places. It was he who had presented a weakness to her. She did pride herself upon her cool power of calculation.

"Go on!" she exclaimed.

"He has been here half the day," he proceeded, growing bolder. "You were out in the garden together all the afternoon—he has only just left you. When you contrast his position with yours is not that an extraordinary thing? What should you say if another woman had gone so far? Two years ago, he was Haworth's engineer. He is a wonderful fellow and a genius, and the world will hear of him yet. I should never think of anything but that if I were the only individual concerned, but you—you treated him badly enough at first."

She turned paler and paler.

"You think that I—that I——"

She had meant to daunt him with the most daring speech she could make, but it would not complete itself. She faltered and broke down.

"I don't know what to think," he answered desperately. "It seems impossible. Good heavens! it is impossible!—you—it is not in your nature."

"No," she said, "it is not."

Even in that brief space she had recovered herself wholly. She met his glance just as she had met it before, even with more perfect *sang froid*.

"I will tell you what to think," she went on. "I have been very dull here. I wished from the first that I had never come. I hate the people, and I despise them more than hate them. I must be amused and interested, and they are less than nothing. The person you speak of was different. I suppose what you say of him is true and he is a genius. I care nothing for that in itself, but he has managed to interest me. At first I thought him only absurd; he was of a low class and a common workman, and he was so simple and ignorant of the world that he did not feel his position or did not care. That amused me and I led him on to revealing himself. Then I found out that there was a difference between him and the rest of his class and I began to study him. I have no sentimental notions about his honor and good qualities. Those things do not affect me, but I have been interested and the time has passed more easily. Now the matter will end just as it began,—not

because I am tired of him or because I care for what people say, but because I think it is time,—and I choose that it should. It is done with from to-night."

"Good heaven!" he cried. "You are not going to drop the poor fellow like that?"

"You may call it what you please," she returned. "I have gone as far as I choose to go, and it is done with from to-night."

Mr. Ffrench's excitement became something painful to see. Between his embarrassment as a weak nature before a strong one,—an embarrassment which was founded upon secret fear of unpleasant results,—between this and the natural compunctions arising from tendencies toward a certain refined and amiable sense of fairness, he well-nigh lost all control over himself and became courageous. He grew heated and flushed and burst forth into protest.

"My dear," he said, "I must say it's a— a deuced ungentelemanly business!"

Her lack of response absolutely inspired him.

"It's a deuced ill-bred business," he added, "from first to last."

She did not reply even to that, so he went on, growing warmer and warmer.

"You have taunted me with being afraid of you," he said, "though you have never put it into so many words. Perhaps I have been afraid of you. You can make yourself confoundedly unpleasant at times,—and I may have shrunk from saying what would rouse you,—but I must speak my mind about this, and say it is a deucedly cruel and unfair thing, and is unworthy of you. A less well-bred woman might have done it."

A little color rose to her cheek and remained there, but she did not answer still.

"He is an innocent fellow," he proceeded, "an unworldly fellow; he has lived in his books and his work, and he knows nothing of women. His passion for you is a pure, romantic one; he would lay his world at your feet. Call it folly, if you will,—it *is* folly,—but allow me to tell you it is worthy of a better object."

He was so astonished at his own daring that he stopped to see what effect it had produced.

She replied by asking a simple but utterly confounding question.

"What," she said, "would you wish me to do?"

"What would I wish you to do?" he stammered. "What? I—I hardly know," he replied weakly.

And after regarding her helplessly a little longer, he turned about and left the room.

CHAPTER XL.

"LOOK OUT!"

THE next morning Ffrench rather surprised Murdoch by walking into his cell with the evident intention of paying him a somewhat prolonged visit. It was not, however, the fact of his appearing there which was unusual enough to excite wonder, but the fact of a certain degree of mingled constraint and effusiveness in his manner. It was as if he was troubled with some mental compunctions which he was desirous of setting at rest. At times he talked very fast and in a comparatively light and jocular vein, and again he was silent for some minutes, invariably rousing himself from his abstraction with a sudden effort. Several times Murdoch found that he was regarding him with a disturbed air of anxiety.

Before going away he made an erratic and indecisive tour of the little room, glancing at drawings and picking up first one thing and then another.

"You have a good many things here," he said, "of one kind and another."

"Yes," Murdoch answered, absently.

Ffrench glanced around at the jumble of mechanical odds and ends, the plans and models in various stages of neglect or completion.

"It's a queer place," he commented, "and it has an air of significance. It's crammed with ideas—of one kind and another."

"Yes," Murdoch answered, as before.

Ffrench approached him and laid his hand weakly on his shoulder.

"You are a fellow of ideas," he said, "and you have a good deal before you. Whatever disappointments you might meet with, you would always have a great deal before you. You have ideas. I," with apparent inconsequence, "I haven't, you know."

Murdoch looked somewhat puzzled, but he did not contradict him, so he repeated his statement.

"I haven't, you know. I wish I had."

Then he dropped his hand and looked indefinite again.

"I should always like you to remember that I am your friend," he said. "I wish I could have been of more service to you. You are a fine fellow, Murdoch. I have admired you—I have liked you. Don't forget it."

And he went away carrying the burden of his indecision and embarrassment and

good intention with much amiable awkwardness.

That day Murdoch did not see Rachel Ffrench. Circumstances occurred which kept him at work until a late hour. The next day it was the same story, and the next also. A series of incidents seemed to combine against him, and the end of each day found him worn out and fretted. But on the fourth he was free again, and early in the evening found himself within sight of the iron gates. Every pulse in his body throbbed as he passed through them. He was full of intense expectation. He could scarcely bear to think of what was before him. His desperate happiness was a kind of pain. One of his chief longings was that he might find her wearing the pale blue dress again and that when he entered she might be standing in the center of the room as he had left her. Then it would seem as if there had been no nights and days between the last terribly happy moment and this. The thought which flashed across his mind that there might possibly be some one else in the room was a shock to him.

"If she is not alone," he said to himself, "it will be unbearable."

As he passed up the walk, he came upon a tall white lily blooming on one of the border beds. He was in a sufficiently mystical and emotional mood to be stopped by it.

"It is like her," he said. And he gathered it and took it with him to the house.

The first thing upon which his eye rested when he stood upon the threshold of the room was the pale blue color, and she was standing just as he had left her, it seemed to him upon the very same spot upon which they had parted. His wish had been realized so far at least.

He was obliged to pause a moment to regain his self-control. It was an actual truth that he could not have trusted himself so far as to go in at once.

It was best that he did not. The next instant she turned and spoke to a third person at the other side of the room, and even as she did so caught sight of him and stopped.

"Here is Mr. Murdoch," she said, and paused, waiting for him to come forward. She did not advance to meet him, did not stir until he was scarcely more than a pace from her. She simply waited, watching him as he moved toward her, as if she were a little curious to see what he would do.

Then she gave him her hand, and he took it with a feeling that something unnatural had happened, or that he was suddenly awakening from a delusion.

He did not even speak. It was she who spoke, turning toward the person whom she had addressed before he entered.

"You have heard us speak of Mr. Murdoch," she said; and then to himself, "This is M. Saint Méran."

M. Saint Méran rose and bowed profoundly. He presented, as his best points, long, graceful limbs and a pair of clear gray eyes, which seemed to hold their opinions in check. He regarded Murdoch with an expression of suave interest and made a well-bred speech of greeting.

Murdoch said nothing. He could think of nothing to say. He was never very ready of speech. He bowed with an uncertain air, and almost immediately wandered off to the other end of the room, holding his lily in his hand. He began to turn over the pages of a book of engravings, seeing none of them. After a little while a peculiar perfume close to him attracted his attention, and he looked downward vacantly and saw the lily. Then he laid it down and moved farther away.

Afterward—he did not know how long afterward—Ffrench came in. He seemed in a very feverish state of mind, talking a great deal and rather inanely, and forcing Murdoch to reply and join in the conversation.

M. Saint Méran held himself with a graceful air of security and self-poise, and made gentle efforts at scientific remark which should also have an interest for genius of a mechanical and inventive turn. But Murdoch's replies were vague. His glance followed Rachel Ffrench. He devoured her with his eyes—a violence which she bore very well. At last—he had not been in the house an hour—he left his chair and went to her.

"I am going away," he said in an undertone. "Good-night!"

She did not seem to hear him. She was speaking to Saint Méran.

"Good-night!" he repeated, in the same tone, not raising it at all, only giving it an intense, concentrated sound.

She turned her face toward him.

"Good-night!" she answered.

And he went away, Ffrench following him to the door with erratic and profuse regrets, which he did not hear at all.

When he got outside, he struck out

across the country. The strength with which he held himself in check was a wonder to him. It seemed as if he was not thinking at all—that he did not allow himself to think. He walked fast, it might even be said, violently; the exertion made his head throb and his blood rush through his veins. He walked until at last his heart beat so suffocatingly that he was forced to stop. He threw himself down—almost fell down upon the grass at the wayside and lay with shut eyes. He was giddy and exhausted, and panted for breath. He could not have thought then, if he would; he had gained so much at least. He did not leave the place for an hour. When he did so, it was to walk home by another route, slowly, almost weakly. This route led him by the Briarley cottage, and, as he neared it, he was seized with a fancy for going in. The door was ajar and a light burned in the living-room, and this drew him toward it.

Upon the table stood a basket filled with purchases and near the basket lay a shawl which Janey wore upon all occasions requiring a toilet. She had just come in from her shopping, and sat on a stool in her usual posture, not having yet removed the large bonnet which spread its brim around her small face, a respectable and steady-going aureole enlivened with bunches of flowers which in their better days had rejoiced Mrs. Briarley's heart with exceeding great joy.

She looked up as he came in but she did not rise.

"Eh! it's thee, is it?" she remarked. "I thowt it wur toime tha wur comin'. Tha'st not been here fur nigh a month."

"I have been—doing a great deal."

"Aye," she answered. "I suppose so."

She jerked her thumb toward Granny Dixon's basket chair, which stood empty.

"She's takken down," she said. "She wur takken down a week sin', an' a noice toime we're ha'in' nursin' her. None on us can do anything wi' her but mother—*she* can settle her, thank th' Amoighty."

She rested her sharp little elbows upon her knees and her chin upon both palms and surveyed him with interest.

"Has tha seed him?" she demanded suddenly.

"Who?" he asked.

"Him," with a nod of her head. "Th' furriner as is stayin' at Mester Ffrench's. Yo' mun ha' seen him. He's been there three days."

"I saw him this evening."

"I thowt tha mun ha' seed him. He coom o' Monday. He coom fro' France. I should na," with a tone of serious speculation,—*"I should na ha' thowt she'd ha' had a Frenchman."*

She moved her feet and settled herself more conveniently without moving her eyes from his face.

"I dunnot think much o' Frenchmen mysen," she proceeded. "An' neyther does mother, but they say as this is a rich un an' a grand un. She's lived i' France a good bit, an' happen she does na' moind their ways. She's knowed him afore."

"When?" he asked.

"When she wur theer. She lived theer, yo' know."

Yes, he remembered, she had lived there. He said nothing more, only sat watching the little stunted figure and sharp small face with a sense of mild fascination, wondering dully how much she knew and where she had learned it all, and what she would say next. But she gave him no further information—chiefly because she had no more on hand, there being a limit even to her sagacity. She became suddenly interested in himself.

"Yo're as pale as if yo'd had th' whoopin'-cough," she remarked. "What's wrong wi' yo'?"

"I am tired," he answered. "Worn out."

It was true enough, but did not satisfy her. Her matter of fact and matronly mind arrived at a direct solution of the question.

"Did yo' ivver think," she put it to him, "as she'd ha' yo'?"

He had no answer to give her. He began to turn deathly white about the lips. She surveyed him with increased interest and proceeded:

"Mother an' me's talked it over," she said. "We tak' th' 'Ha'penny Reader,' an' theer wur a tale in it as tow'd o' one o' th' nobility as wed a workin' chap—an' mother she said as happen she wur loike her an' ud do it, but I said she would na. Th' chap i' th' tale turnt out to be a earl, as ud been kidnapped by th' gypsies, but yo' nivver wur kidnapt, an' she's noan o' th' soft koin'd. Th' Lady Geraldine wur a difrient mak'. Theer wur na mich i' her to my moind. She wur allus makkin' out as brass wur nowt, an' talkin' about 'humble virchew' as if theer wur nowt loike it. Yo' would na ketch *her* talkin' that road."

Mother she'd sit an' cry until th' babby's bishop wur wet through, but I nivver seed nowt to cry about mysen. She getten th' chap i' th' eend, an' he turnt out to be a earl after aw. But I towd mother as marryin' a workin' man wur na i' *her* loine."

Murdoch burst into a harsh laugh and got up.

"I've been pretty well talked over, it seems," he said. "I didn't know that before."

"Aye," replied Janey coolly. "We've talked yo' ower a good bit. Are yo' goin'?"

"Yes," he answered, "I am going."

He went out with an uncertain movement, leaving the door open behind him. As he descended the steps, the light from the room, slanting out into the darkness, struck athwart a face, the body pertaining to which seemed to be leaning against the palings, grasping them with both hands. It was the face of Mr. Briarley, who regarded him with a mingled expression of anxiety and desire to propitiate.

"Is it yo'?" he whispered as Murdoch neared him.

"Yes," he was answered, somewhat shortly.

Mr. Briarley put out a hand and plucked him by the sleeve.

"I've been waitin' fur yo'," he said in a sonorous whisper which only failed to penetrate the innermost recesses of the dwelling through some miracle.

Murdoch turned out of the gate.

"Why?" he asked.

Mr. Briarley glanced toward the house uneasily, and also up and down the road.

"Le's get out o' th' way a bit," he remarked.

Murdoch walked on, and he shuffled a few paces behind him. When they got well into the shadow of the hedge, he stopped. Suddenly he dropped upon his knees and crawling through a very small gap into the field behind, remained there for a few seconds; then he re-appeared panting.

"Theer's no one theer," he said. "I would na ha' risked their bein' one on 'em lyin' under th' hedge."

"One of whom?" Murdoch inquired.

"I did na say who," he answered.

When he stood on his feet again, he took his companion by the button.

"Theer's a friend o' moine," he said, "as 'as sent a messidge to yo'. This here's it—'Look out!'"

"What does it mean?" Murdoch asked. "Speak more plainly."

Mr. Briarley became evidently disturbed.

"Nay," he said, "that theer's plain enow fur me. It ud do *my* business i' quick toime if I"—

He stopped and glanced about him again and then without warning threw himself, so to speak, on Murdoch's shoulder and began to pour a flood of whispers into his ear.

"Theer wur a chap as were a foo'," he said, "an' he was drawed into bein' a bigger foo' than common. It wur him as gotten yo' i' trouble wi' th' stroikers. He did na mean no ill, an'—an' he ses, 'I'll tell him to look out. I'll run th' risk.' He knowed what wur goin' on, an' he ses, 'I'll tell him to look out.'"

"Who was he?" Murdoch interposed.

Mr. Briarley fell back a pace, perspiring profusely and dabbing at his forehead with his cap.

"He—he wur a friend o' moine," he stammered,—“a friend o' moine as has gotten a way o' gettin' hissen i' trouble, an' he ses, 'I'll tell him to look out.'"

"Tell him from me," said Murdoch, "that I am not afraid of anything that may happen."

It was a rash speech, but was not so defiant as it sounded. His only feeling was one of cold carelessness. He wanted to get free and go away and end his night in his silent room at home. But Mr. Briarley kept up with him, edging toward him apologetically as he walked.

"Yo're set agen th' chap fur bein' a foo'," he persisted, breathlessly, "an' I dunnot blame yo'. He's set agen hissen. He's a misforchnit chap as is allus i' trouble. It's set heavy on him, an' ses he, 'I'll tell him to look out.'"

At a turn into a by-lane he stopped.

"I'll go this road," he said, "an' I'll tell him as I've done it."

(To be continued.)

THE MEDITERRANEAN OF AMERICA.

THE Indian canoe-men about the mouth of the Amazons sometimes pick up pieces of a porous gray substance which floats with sticks and rubbish on the current. They know nothing of the origin of this *pedra-pomes*; it is good for cleaning guns and knives, and they keep fragments of it about their houses for that purpose; I have some pieces of it which were given me by the poor folk as presents of some value. These floating bits have a story to tell. They speak of fierce, glowing heat, of streams of red-hot lava gushing down the sides of burning mountains, cooling slowly while puffed out with gases, and forming beds of pumice-stone, as light as cork. They tell again of snow-fed streams, rushing and tumbling over the rocks, undermining the lava-beds, and tearing off great fragments of the porous stone. These fragments are borne downward on the strong current, jammed against rocks, pounded and whirled about in the rapids, and ground between floating tree-trunks, until they reach the quiet water below; there a thousand tiny streams have united to form a broad river, which flows swiftly between forest-clad banks and past solitary Indian huts, until it is merged into a yet broader and deeper flood—the mighty Marañon, the Peruvian Amazons.

The fragments tell now of long stretches of clay-stained water; of open horizons east and west; of verdant shores and archipelagoes; of pathless forest, where the woodman's ax is never heard and the dusky hunter glides unobserved through the shadowy arcades of foliage; of sand-banks lighted by the fires of the turtle-hunters; of scattered settlements, half buried in the green forest; of weeks, months perhaps, in the swift current before the stained and battered fragments reach the sea.

We must conceive of the Amazons not as a single stream, but as a great alluvial flat, furrowed by a net-work of broad and narrow channels, and with much of its surface occupied by shallow lakes. All large rivers have such alluvial systems along their lower courses (the bayous and lakes of the lower Mississippi are familiar examples); but on other streams the plains narrow off as we ascend them, and are soon lost; on the Amazons alone they extend almost to the

head-waters, as if a sea had been filled in, leaving deep ditches for the water-flow, and countless pools on the surface. From Manáos to the Atlantic, the width of this alluvial flat varies from fifteen miles to a hundred or more; on the upper Amazons it is probably still wider;* only as we approach the Andes, the rocky shores are narrowed to the main stream.

In our voyage up the river we shall see very little of the highlands; our first rambles then will be among the islands and channels of the *varzeas*, with their swampy forests and stretches of meadow, and half-submerged plantations. And the lowlands deserve a much more careful study than has ever been given them.

We leave Pará with the midnight tide; by gray morning we are steaming across the Bay of Marajó, which is not a bay at all, but properly a continuation of the Pará River. The wind blows briskly over the wide reaches, swaying our hammocks under the arched roof of the upper deck; we roll our blankets closer around us, and let who will retreat to the stifling state-rooms. But if Boreas cannot unwrap us, Phœbus brings us out quickly enough; we rise to look upon the beautiful morning, with the sun shining in our eyes, and the bright waves leaping and dancing for joy.

The water-system of this region belongs, perhaps, more properly to the Tocantins than to the Amazons. Marajó, commonly spoken of as an island in the mouth of the Amazons, is not to be confounded with the silt-formed archipelagoes of the river-valley, for it contains high as well as low land; it is rather a great tract cut off from the main shores by a net-work of narrow channels, through which the Amazons sends its contribution of water to the Pará River. But as this contribution is at least equal to the combined outflow of the Tocantins and its neighbors, the Pará has a fair claim to Amazonian honors.

Even the Amazons is no broader; crossing the mouth of the Tocantins the main channel is like a sea, with great reaches of open horizon. But farther on we enter the system of passages that separate Marajó

* I am not personally familiar with the river above Obidos.



ON THE AMAZONS.

from the main-land, where the steamer keeps close to the forest-clad shores.* Any one who is not blind must feel his soul moved within him by the marvelous beauty of the vegetation. Not a bit of

* These channels are generally described as only just wide enough for the steamer to pass through them; a natural mistake, because the towering forest makes them look narrower. Most of them are as broad as the Hudson at Albany.

ground is seen; straight up from the water the forest rises like a wall,—dense, dark, impenetrable, a hundred feet of leafy splendor. And breaking out everywhere from among the heaped-up masses are the palm-trees. For here the palms hold court; nowhere else on the broad earth is their glory unveiled as we see it: soft, plummy *Jupatis* drooping over the water, and fairy-light *assaïso* and *bussús* with their light-green vase-like forms, and great noble fan-leaved *miritis* looking down from their eighty-feet high columns, and others that we hardly notice at first, though they are nobles in their race. If palms, standing alone, are esteemed the most beautiful of trees, what shall we say when their numbers are counted, not by scores, nor hundreds, but by thousands, and all in a ground-work of such forest as is never seen outside of the tropics?

The scene is infinitely varied; sometimes the palm-trees are hidden, but even then the great rolling mass is full of wonderful changes, from the hundred or more kinds of trees that compose it; and again the palms hold undivided sway, or only low shrubs and delicate climbing vines soften their splendor. In most places there are not many large vines; we shall find their kingdom farther up the river, and on the highlands; here we sometimes notice a tree draped with pendent masses, as if a green tapestry were thrown over it. Down by the



AT BREVES.

water's edge the flowering convulvi are mingled with shield-like leaves of the arborescent arums, and mangroves standing aloft on their stilt-like roots, where they are washed by the estuary tides.

The Indian pilot points out numbers of rubber-trees, and we learn to recognize their white trunks and shining bright-green foliage. This low tide-region is one of the most important rubber-districts, where hundreds of *seringueiros* are employed in gathering and preparing the crude gum. Occasionally we see their thatched huts along the shore, built on piles and always damp, reeking, dismal, suggestive of agues and rheumatism; for the tide-lowlands, glorious as they are from the river, are sodden marshes within, where many a rubber-gatherer has found disease and death.

The little town of Breves owes its prosperity to this dangerous industry. It is built on a low strip of sandy land, but with swamps on either side coming close up to the town. Even along the water-front the main street is a succession of bridges. But the houses are well built, of brick or adobe, and the stores contain excellent stocks of the commoner wares. It looks fresh and pretty enough; the miasma of the swamps does not often rise to the high lands, so we are not loth to remain here for a few days and study the rubber industry more closely.

In the river-towns there are no hotels; but we are provided with a letter of introduction, which insures us a hearty welcome and a home as long as we care to stay. For the Amazons is a land of hospitality. Out of the large cities, a stranger, even un-introduced, will always find shelter and food, and for the most part without a thought of remuneration; and, if on a longer stay he occupies a house of his own, he will be expected to extend the same hospitality to others.

The rubber-swamps are all around, but land traveling is out of the question. So an Indian canoe-man is engaged,—a good-natured fellow, and an adept in wood-craft. He sets us across the river at a half-ruined hut, where bright vines clamber over the broken thatch and hang in long festoons in front of the low door-way; but within, the floor is sodden black clay, and dark mold hangs on the sides, and the air is like a sepulcher. The single slovenly *mameluca* woman who inhabits the place complains bitterly of the ague which tortures her; yet year after year, until the house

falls to pieces, she will go on dying here, because, forsooth, it is her own and the rubber-trees are near. She will not even repair the structure. You can see sky through the roof, but if rain drives in she will swing her hammock in another corner, and shiver on through the night as best she may; for to-morrow there are rubber-trees to be tapped, and a fresh harvest of the precious milk to be brought home,—and what will you have? One must expect discomfort in a swamp.

Back of the house the rubber-trees are scattered through marshy forest, where we clamber over logs, and sink into pools of mud, and leap the puddles; where the mosquitos are blood-thirsty, and nature is damp, and dark, and threatening; where the silence is unbroken by beast or bird,—a silence that can be felt; it is like a tomb in which we are buried, away from the sunshine, away from brute and man, alone with rotting death. The very beauty of our forest tomb makes us shudder by its intensity.

In the early morning, men and women come with baskets of clay cups on their backs, and little hatchets to gash the trees. Where the white milk drips down from the gash they stick their cups on the trunk with daubs of clay, molded so as to catch the whole flow. If the tree is a large one, four or five gashes may be cut in a circle around the trunk. On the next day other gashes are made a little below these, and so on until the rows reach the ground. By eleven o'clock the flow of milk has ceased, and the *seringueiros* come to collect the contents of the cups in calabash jugs. A gill or so is the utmost yield from each tree, and a single gatherer may attend to a hundred and twenty trees or more, wading always through these dark marshes, and paying dearly for his profit in fever and weakness.

Our *mameluca* hostess has brought in her day's gathering—a calabash full of the white liquid, in appearance precisely like milk. If left in this condition it coagulates after a while and forms an inferior whitish gum. To make the black rubber of commerce the milk must go through a peculiar process of manufacture, for which our guide has been preparing. Over a smoldering fire, fed with the hard nuts of the *tucumá* palm, he places a kind of clay chimney, like a wide-mouthed, bottomless jug; through this *boião* the thick smoke pours in a constant stream. Now he takes his mold,—in this case a wooden one, like a round-bladed paddle,—



ON THE BANKS.

washes it with the milk, and holds it over the smoke until the liquid coagulates. Then another coat is added, only now, as the wood is heated, the milk coagulates faster. It may take the gatherings of two or three days to cover the mold thickly enough. Then the rubber is still dull white, but in a short time it turns brown and finally almost black, as it is sent to the market. The mass is cut from the paddle and sold to traders in the village. Bottles are sometimes made by molding the rubber over a clay ball, which is then broken up and removed. Our old-fashioned rubber shoes used to be made in this way.

Twenty million pounds of rubber, valued at \$6,000,000, are annually exported from Pará; in the dry season many thousand people are engaged in gathering it. But the business is altogether a ruinous one for the province, as Brazilians themselves are fully aware. The *seringueiro*, who gains two or three dollars from a single day's gathering, has enough, as life goes here, to keep him in idleness for a week; and when his money is spent, he can draw again on his ever-ready bank.

It is so with all the forest industries; they encourage idleness, and draw workmen from agricultural employments, and retard civilization by keeping the Indian and half-breed population away from villages and schools, yet not from the worst side of white life. The small traders have consciences as elastic as the rubber they buy. Generally they sell goods on credit, and when the poor ignorant people come to pay in produce, they come to a tyrant, who will charge them twenty milreis where they owe ten; who will force them to work for him, though he has no legal right to their services; who will sell them inferior goods at high prices, and take their produce at low ones. In this way one can see how even the small merchants manage to live. For instance, one of them buys a coarse German wood-knife, which, including freight from Pará, may cost him seventy-five cents. He sells this as an American article for two dollars, takes his pay in rubber at sixty-five cents the kilogram, and sells the latter for seventy-five cents the kilogram, with a sure market; total profit, over 200 per cent., and that when the trade is "*honesto*." They tell of one trader who carried to the River Tapajós a box of playing cards, which he was unable to sell because the Indians did not know their use; so this Christian gentleman picked out all the face-cards, and sold them as saints at fifty cents each. So the story goes, and the man does not deny it;



PREPARING RUBBER.



THE RUBBER GATHERER.

but, in justice to human nature, I prefer to doubt its entire truth.

The half-wild *seringueiros* will go on submitting to impositions and dying here in the swamps, until Brazilians learn that by purchasing this land from the government and planting it in rubber-trees, they can insure vastly larger profits, and do away with the evils of the present system. It is what must eventually be done. The rubber gatherers, in their eagerness to secure large harvests, have already killed an immense number of trees about the Pará estuary; they have been obliged to penetrate farther

and farther into the forest, to the Tocantins, Madeira, Purús Rio Negro, and eventually even these regions must be exhausted, unless they are protected in some way. The trees, properly planted and cared for, will yield well in fifteen years, and, of course, the cost of gathering would be vastly reduced in a compact plantation; half the present labor of the rubber collector consists in his long tramps through the swampy forest.

Around Breves, rubber is almost the only product of the lowlands; the whole region is simply an endless succession of channels, and small lakes, and swamps covered with forest—beautiful beyond thought from without, a dismal wilderness within. From the village we could take canoe-trips in almost every direction, and return by different routes to our starting-point; or we could spend days in voyaging and never repossess a place.

If we could only transport some of this forest to a northern park! If we could bottle up the sunshine and let it loose in Broadway! Our canoe passes along by shores where we would fain pause at every turn to catch some new effect of light and color; and as we are looking at the opposite side, our man may keep the boat steady by holding on to a palm-tree or an arum-plant, which would soon draw half the people in New York to see it, if we could set it in one of the squares.

And now we turn into a narrow channel, a mere cleft in the forest-wall; it is not more than ten yards wide, but, as in all these forest streams, the depth is considerable; hence, the Indians call such channels *iga-*



BREVES CHANNEL.

rapés, literally canoe paths. There is a richness about all water-side vegetation that makes even our northern woodland streams superbly beautiful; but here the foliage is far thicker and more varied, and, among the

other channels, for not a glimpse of northern or southern highland is seen over the dead level of the *varzeas*. No danger of running aground here. Along the sides our charts may mark twenty, thirty,



THE TABLE-TOPPED HILLS.

dark leaves, drooping palm-fronds and great glossy wild-bananas spread their warm tropical splendors. One thinks of a temple; the arching boughs, the solemn cathedral shade, the sunshine breaking through to cast long trails on the quiet waters and drop golden glories over the tree-trunks and crooked water-washed roots, while tiny leaflets catch the glow, and shine like emeralds and diamonds in the dark forest setting. Even the Indian boatman dips his paddle noiselessly, as if he feared to disturb the Sabbath stillness. There is not much of animal motion; only now and then a brown thrush crosses the stream, or a *cuajud* bird sounds his shrill alarm from the tree-tops, or great butterflies come waving along like blue silken banners, casting vivid reflections in the water, so bright are their glossy wings. But we must learn that solitude, not life, is the grand feature of these forests.

So we look, and wonder, and look again, until the steamer comes along to take us away from Breves; we carry off a thousand pleasant memories, and, as souvenirs, a lot of the fearfully ugly painted pottery for which the place is famous. Our good host comes down to the wharf to see us off, and to assure us once more that his house is always "*às suas ordens*," whenever we care to return to it. May he always find hearts as kindly as his own!

We must travel all night yet before we emerge from the Breves channels into the broad northern stream. But we reach it at last,—the giant Amazons, the river of Orrellana, and Acuña, and Martius, the river with the destinies of a continent in its future. Its yellow waters, five miles broad, sweep majestically toward the sea. East and west lie open horizons, where the lines of forest are lifted up by the mirage, and broken into clumps and single trees, until they are lost in the sky. On either side there may be two or three

forty fathoms; but out in the middle it is always "*ha muito fundo*"; in the strong current the bottom is unattainable by ordinary instruments. The snows of half the Andes are flowing here, the drainings of a region as large as the United States. This main channel varies greatly in breadth; it may be seven or eight miles wide, as near the junction of the Xingú, or narrowed to hardly a mile, as at Obidos, where the whole mighty flood rushes past in one body. No instrument ever brought here could measure the depth at Obidos; we only know that it is very great; probably exceeding, by a hundred feet or more, that of Lake Ontario. Almost to the base of the Andes the river is deep enough for ocean vessels. But you could voyage from Pará to the fron-



VEGETATION OF THE RAISED BORDER.

tier of Brazil, and hardly enter the main stream at all. Everywhere there are side channels—*paranámiris*, and *furos**—rivers of goodly size, though they do not appear at all on the maps; some of them, in fact, are hardly less broad than the parent flood. Without counting the tributaries, I am safe in saying that there are ten thousand miles of navigable water-way in the Amazons valley.

The steamer passes from one side to another as we touch at the river-towns; mere hamlets, specks in the wilderness. Most of them are on *terra firma*,† but hardly raised above the flood-plains. Frequently we stop to take in fuel at some *fazenda*,

table-land through which the river has cut its way; some of them are 1,600 feet high. It is easy enough to say this; but I confess that I am more and more filled with astonishment when I contemplate the vast extent of this aqueous denudation. Conceive of a mass two thousand miles long, on the average at least thirty-five wide, and varying in thickness from four hundred to eighteen hundred feet, all washed down to the sea by a single river! And you have to add to this the wide valleys of the tributaries, collectively at least as much more; it is even probable that the table-land itself was much thicker,—two thousand or twenty-five hundred feet. We have the very best of proof



CACAO ORCHARD.

where the wood that is put on is counted slowly, stick by stick. After passing the mouth of the Xingú, we see the flat-topped hills on the northern side, like a line of mountains, all cut off at the same level. They are remnants of the great

* *Paraná*, in the Indian language (*Lingua geral*), means the sea, and is also applied to the Amazons; *paraná-miri* is a little sea, a lesser Amazons. Properly, this term is applied only to a channel which leaves a river above, and enters it again below; while a *furo* is a passage from one channel to another; but the words are loosely used.

† On the Amazons this term is applied to all land that is not alluvial or swampy. *arreas*, or *vargens*, are the flood-plains.

that all this has been done since the beginning—or, more probably, the middle—of the Tertiary period, the last of the geological ages. The elder Agassiz supposed that the whole valley was to be referred to glacial action. Naturalists are now convinced that he was wrong; but surely the wonder is not lessened. The world is full of just such proofs of the power of water, the symbol of instability and weakness.

The hills are twenty miles away; between them and the main river there is a great belt of netted flood-plains,—in this district, for the most part, covered with grass-growth. Yet we do not see this; from the river there is



DRYING CACÁO.

only the same succession of forest-lined *varzeas*, with banks cut so steep that our steamer can keep close in shore; sometimes we almost brush the foliage. In most places, if we land from the main river or a side channel, we find, not marshes, as at Breves, but comparatively high land, running along the shore. The great trees are festooned with vines, and thick-leaved branches reach out over the water; but there is not much undergrowth, and we can easily walk inland. We find that after a little space the ground slopes gradually away from the river; two or three hundred yards from the bank the belt of forest ceases, and we come out suddenly on a great stretch of meadow, or a lake, the farther shore of which is lost on the horizon.

To explain these features, we must remember that the islands and flats have been formed by the river itself. Every year, in February and March, the Amazons rises to a height of thirty feet or more above its ordinary level, and overflows the meadow land in all directions. Now, in the river the particles of mud and clay are held in suspension by the swift current; but as the water flows over the meadows it becomes quiet, and the particles sink to the bottom. Naturally the coarser detritus is deposited first, near the river, and at last it builds up a ridge, as we have seen. When fully formed, the top of the ridge, in some places, is just out of reach of the highest floods. The meadows, being lower, are flooded during several months; hence the forest trees will not grow on them; but they flourish well on the banks, where their roots are only covered during three or four weeks.

The raised borders are the farming-lands of the *varzeas*. Corn, cotton, sugar-cane and tobacco all grow well on them; mandioca, which on the highlands requires more than a year to mature its roots, yields rich harvests on the plains during six months of the dry season. But between the Rio Negro and the Xingú, the most important lowland crop is cacáo. It is true, the trees will grow quite as well or better on the *terra firma*; but Brazilians prefer the *varzeas* for their plantations, because the ground is easily prepared and takes care of itself; besides, the orchard arrives at maturity much sooner. We hardly notice these cacáo plantations from the river; the dark green of the foliage is so like the forest, and generally there are other trees near the shore. But for miles the banks are lined with them, mostly the orchards of small proprietors, who own a few hundred *pés* of cacáo; though some of the estates have twenty or thirty thousand trees. In our wanderings about the lowland we often pass through these *cacoaes*. They have a rich beauty of their own,—the dense foliage, the twilight shade beneath, and the dark stems, four or five together, with the fruit growing, not among the leaves, but directly from the trunk and main branches, attached only by a short stem. The ground is quite clear and free from underbrush, and in the summer when the fruit is gathered is for the most part dry. The harvest months are July and August, when the gatherers go every day to pick the ripe fruit from each tree and bring it in baskets to the house. There the oval, ribbed outer shell is cut open and the seeds are washed from the white pulp; then they are spread over mats and placed on raised

stagings to dry in the sun, care being taken to turn them at intervals. Most of the seed is exported in this form; a little is roasted, pounded, and made into cakes with melted sugar for the delicious chocolate of the country. Unfortunately, on the Amazons the sun is a very uncertain drying agent; frequently there are heavy showers, and the sky is clouded for days together; so it often happens that the imperfectly prepared seed gets musty and half rotten before it reaches the market. Much of the Pará cacáo,

or two serenaders, piping cannily about our ears, but swarms of them,—blood-thirsty monsters, making straight at face and hands with a savage desire to suck our life out of us. At night the houses must be closed tight, and even then the little torments come in through every chink, making life a burden to a sensitive man. And yet, in justice to the Amazonian mosquito, I must say that I have never found his bite half so virulent as that of his cousin in the Jersey swamps; after a day in the forest, where one



LOOKING OVER THE LOWLANDS FROM MONTE ALEGRE.

therefore, does not rate very high with the manufacturers. All this might be avoided by the introduction of a simple drying-machine, such as is used at Rio for coffee.

Stopping at the *fazendas*, we frequently get a refreshing drink, made from the white pulp which surrounds the cacáo-seeds. Enterprising planters prepare from this pulp a delicious amber jelly, which, if it were placed in the market, would be much more popular than guava-jelly. Even the shells are valuable; they are dried and burned, and from the ash is prepared a very strong brown soap—a necessity to every Amazonian washerwoman.

The high *varzeas* are healthful enough; unlike the Breves tide-plains, malarial fevers are not at all common here. But life on the cacáo-plantations has one great drawback: all the tigers and anacondas in Brazil can never compare to the terror of the mosquitos; not one

is constantly exposed to their attacks, all irritation is removed by a cold water bath. Nor must one infer that these pests are everywhere; they keep to the woods, only coming out at night; at Pará and Breves we saw very few of them, and in the thick forest of the highlands, away from the channels, they are hardly noticed.

Back from the river we can ride for miles over the great breezy meadows, only we must make long detours to avoid the lakes and swampy forests and clumps of shield-leaved arums. There are a thousand beautiful things to see on these campos; bright yellow and white flowers dotting the surface, pretty warblers and finches and whistling black *japús*, little fishes in the pools and brilliant dragon-flies entomologizing over the reeds; drooping bushes of sensitive plant, with wonderfully delicate, feathery leaves all spread out gratefully to the sun;



VICTORIA REGIA.

and which, if one jars the branch roughly, close and bend down in mute remonstrance, the protest of their helplessness against our brute strength.

Far away from the river, and sheltered in bays of the highland, the meadows are as level and clean as a wheat-field, bright velvety green, rippling with the wind like a great lake. Everywhere the grass is dotted with cattle. Such places, indeed, owe their beauty to the fires with which the herdsmen yearly cleanse their surface. They are the favorite pastures, and most of them have been absorbed into the estates of large proprietors.

The grazing industry is gradually assuming very large proportions on the Middle Amazons, as it has heretofore on Marajó.

It is true that the herds do not compare, and probably never will, with those of La Plata; but there is an immense field for profit on these lowlands if the present barbarous system can be superseded by a more civilized one. The cattle are a hardy, half-wild stock, well suited to the rough life they lead, but of small productive value. The only profit derived is from the meat and the hides; owing to the over-supply, the meat is very cheap, retailing at from three to five cents per pound; the hides are carelessly cured and often half spoiled. As for the milk, no value at all is set on that; the herdsmen drink it sometimes, but the town-people hardly use it even in their coffee, and butter and cheese manufactures are



THE PIRACÔ FISHER.

unknown. It is true that the cows give very little, a quart or two at the utmost, and that only when they are running on the lowland pastures; but with improved breeds and careful management I see no reason why the yield should not be equal to that of our northern herds. Excellent butter is made now by American residents; this and cheese ought to be manufactured in large quantities. The great difficulty in the way of successful grazing is that the lowland meadows must be abandoned during the floods; then the cattle are driven away to the scanty pastures of the highland campos; sandy tracts, with scattered trees, and short wiry grass. Even these are of limited extent; numbers of small herds are confined to little islands of the raised border, and reduced to rations of the long *canna-rana* grass, which the herdsmen cut for them over the submerged land; but there is not enough of this for their wants, and the poor beasts may be seen wading up to their necks to catch the floating leaves. Hundreds die of disease and famine; when the rise of water is rapid, whole herds are drowned.

Some system of winter-feeding ought to be devised. For instance, near large sugar-plantations, where cane is ground in the wet season, the tops might be utilized in this way; or the richly nutritive *canna-rana* grass of the floating islands could be collected in steamboats and sold to the herdsmen at a small price. As for hay, it probably could not be preserved in this humid climate; but various succulent roots grow almost spontaneously, and every northern herdsmen knows their value for milch-cows. It might even be profitable to plant pastures on the high land.

I wish some enterprising American grazer would turn his attention to these plains. He would have to introduce new breeds with caution; probably it would be well to cross them with the hardy native stock. There would be other difficulties, no doubt, but I am sure that they would disappear before American pluck and ingenuity. Surely, with canned butter selling at seventy-five cents a pound, and land worth hardly so much per acre, there are vast possibilities for profit here. For making butter on a large scale it might be necessary to import or prepare ice. Even as now carried on, the industry is very lucrative. Some of the large proprietors own from ten to thirty thousand head of cattle, valued at eight or ten dollars per head. They employ hundreds of herdsmen,—hardy fellows, in the saddle from morning

till night, hunting up strays, keeping the herds in rich pasture, and branding them every year. We often see these *vaqueros* galloping over the campos on their wiry little gray horses, each with a bright red blanket rolled behind the rough wooden saddle, and a lasso-cord hanging in front; their bare great-toes thrust into tiny stirrups, and their hair streaming in the wind.*

Climbing the heights of Monte Alegre, we look off over great stretches of the meadow-land, threaded by channels and dotted with quiet little lakes. The eye strives in vain to unravel the intricacies of this vast network. Yet it is all governed by certain fixed rules; there is a science of the lowlands. Here, just as everywhere else, we find that no natural form, however complicated, is the result of accident. The lakes are mere shallow depressions in the meadow-land; some of them dry up entirely in September and October, or remain only as rows of pools and swampy flats; many, even of the larger ones, are so shallow that in the dry season canoes are poled across them; five miles from shore a man can stand on the bottom with head and shoulders above water, and one might wade across but for the alligators and the fierce little cannibal fishes.

The smaller lakes are innumerable; in fact, there is every gradation in size down to pools and puddles. Sometimes our canoe-men can hardly push their way through the thick growth of aquatic plants; or, where the waters are still, we hold our breath to see the eight-feet-broad leaves of the *Victoria regia*, and its superb white and rosy flowers.† Nearly all the lakes are connected with the rivers, often by very long and tortuous channels,—forest-covered creeks, or passages in the open meadow, or wider *igarapés* lined with soft plummy bamboos and graceful *caraná* and *javary* palms. Where the banks are shelving, great flocks of herons gather to fish in the shallow water, flying up in snowy clouds before the canoe; roseate spoonbills spread their wings like flashes of sunset; egrets and bitterns hide in the tall grass. I love best to pass through these channels in the early morning, when the palm-tops are sharply defined against the deep blue sky, and the bamboos look white in contrast to the shadows beneath them, and

* Leather-tanning and shoe-making would be very profitable. Excellent tan-bark is obtained from various highland trees.

† I have measured flowers which were $1\frac{1}{2}$ inches in diameter.

the rising sun Intensifies the picture with its wonderful richness of light and color. Then the wind blows freshly across the meadows, rippling the young grass; parrots and macaws come flying over the lowland in pairs, screaming loudly; toucans call from the solitary trees, and small birds innumerable keep up a ringing concert. They are all so happy to see the day, so brimming over with the gladness of life!

Heaven forgive me for my ingratitude! Even among the home friends I am forever panting to get back to my forests and streams. I am half minded to buy a wooden canoe and a fishing spear of the first Indian we meet, and to go sailing away, away, among the crooked channels and sunny lakes until I lose myself in their intricacies. One could live a hermit, and plant mandioca, and catch fish just as the Indians do, and live a life of peace. As it is, I must needs content myself with watching the Indian fishermen, and half envying them in my heart.

In the summer the Indians come by hundreds to the lakes and channels to fish for the great *pirarucú* (*Sudis*), and to prepare the flesh, just as cod-fish is prepared on the Newfoundland banks. They build little huts along the shores; trading canoes come with their stock of cheap wares to barter for the fish, and a kind of aquatic community is formed, which breaks up with the January floods. The *pirarucú* feeds among the floating grass-patches, in shallow water; sometimes the fishermen watch for it here; in the open lakes one man paddles the canoe gently, while another in the bow stands ready to cast his harpoon at the fish as they come to the surface. Successful lake-fisheries depend, first, on high floods, which allow the fish to come in from the river over the submerged land; second, on low summer *vasantes*, which keep them confined to narrow limits and in shallow water. When both of these fail, the fisheries are unproductive; hence the price of dried *pirarucú* varies in different years from \$1.50 to \$8.00 the *arroba* (thirty-two pounds). Most Americans do not care to eat it at any price, yet one may come to

like it very well. It is the standard article of food with the lower classes all through the Amazons.

Besides the *pirarucú*, the lakes and channels swarm with smaller fishes innumerable. The Indians catch them with a line, or spear them with tridents; in the small streams they are shot with arrows,—an art which requires peculiar skill, since one must allow for the refraction of the water. Even the little brown urchins take lessons by hooking the hungry *piranhas*, which will bite at anything, from a bit of salt meat to a bather's toe. Our northern trout-fishers are scandalized to see these boys thrashing the water with their poles to *attract* the *piranhas*. Turtles, too, are caught in the river; and on the sand-banks, where the animals come to dig their nests, the canoe-men go around with sharpened sticks, probing for the delicious eggs. Oil is made from these eggs, and on the upper Amazons the turtles themselves are kept in pens for the winter supply of meat.

The time of plenty is the dry season. With



INDIAN SHOOTING FISH.

the heavier rains of January the river rises rapidly. By March it has overspread all the lowlands like a sea, a vast sheet, two thousand miles long, and thirty or forty in average width, with only lines of forest and floating grass marking the limits of lakes and channels; canoes pass almost straight across. In May and June the waters recede.

In the river-towns one hardly notices the changes; only in the winter there are more rains and the air is damp, so that shoes gather mold, and books drop to pieces. The people lead the same quiet life, year in and year out; the well-to-do merchant is content with his slow sales and large profits; mechanics work clumsily in the manner of their fathers; Indians and mulattoes are satisfied with their mongrel existence, half the year in their palm-thatched houses, the other half wandering through the forests and over the lowlands.

The largest of these river-towns is Manáos, but it is little more than an overgrown village. Obidos, Santarem, Cametá and Tefé may each have two or three thousand inhabitants; the rest seem hardly worth mentioning. In all the world there is no region of like extent with the Amazons valley which is so thinly settled. A vast proportion of the surface is abandoned even by the wandering cannibal tribes.

Yet it is no wonder that Brazilians proudly call the Amazons the Mediterranean of America. Not alone for the main stream; the great branches spread their arteries in all directions, navigable often for hundreds of miles. And so the giant stream flows on, through the richest region on earth, yet the least known; where tropical heats are

tempered by the refreshing trade-winds, and the climate is wholesome in most places; where all nature seems to invite man to come, yet the region of all others which man has forsaken—a glorious desert, an overflowing wilderness.

But the floating pumice-stones are full of prophecy. Across the continent, the Andes send their messengers to the Atlantic; and with the eye of faith one can see the wealth of the Pacific coast floated down on these waters to enrich the civilized world; isolated republics drawn into the sisterhood of nations by the strong bands of commerce; rich cities rising on the no longer silent shores; narrow prejudices disappearing with foreign intercourse.

Will it be soon? Sooner than we look for, may be. Brazil gave the signal by opening the Amazons to free navigation. Bankrupt Peru dreams yet of her railroad over the Andes; if she ever builds it her commerce will go—not westward to the Pacific but eastward to the Huallaga and Purús. The Mamoré Railroad is now surveyed around the falls of the Madeira. It may be abandoned for the present; even if it is built now it will not be a paying enterprise for years; but sometime it must be an achieved fact, and Bolivia will look back with wonder on her mule-train commerce. Colombia has had commissions at work exploring the Ica and Jamundá, and steamboats have penetrated from Pará almost to her capital. These are but signs; but be it soon or late the destiny of the Amazons is sure. Even the Darien ship-canal, if it is ever made, cannot compete with this deep, straight channel for the trade of the western republics.

HOPE.

NO MATTER^o where we sail,
A storm may come to wreck us—
A bitter wind, to check us
In the quest for unknown lands,
And cast us on the sands,
No matter where we sail:

Then, when my ship goes down,
What choice is left to me
From leaping in the sea—
And willingly forsake
All that the sea can take,
Then, when my ship goes down?

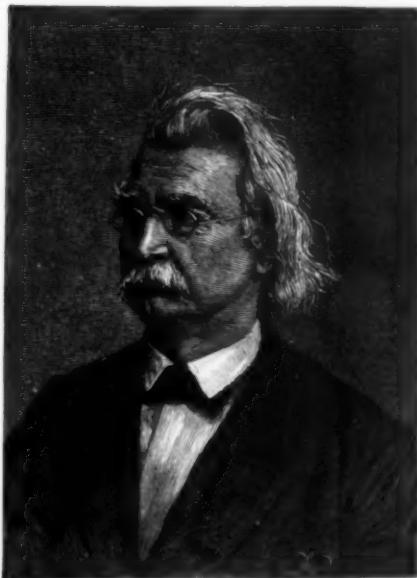
Still, in spite of storm,
From all we feel or fear
A rescue may be near:
Though tempests blow their best,
A manly heart can rest
Still, in spite of storm!

THE UNIVERSITY OF BERLIN.

IN England, in France, and in Germany, especially during the last ten years, the question of remodeling the whole system of higher education has been violently debated. Innumerable pamphlets, advocating a dozen conflicting schemes and agreeing only in their extreme disrespect for the historic tradition, have from time to time appeared, and have tended to strengthen the conviction in the public mind that a reform of some sort was an urgent necessity. It is, however, a notable circumstance that both in England and France the most unprejudiced thinkers and those whose experience in educational affairs give them a special right to be heard, have recognized the excellence of the German university system, and have generally agreed in pronouncing it superior to their own. With us, too, a similar conviction seems slowly to be gaining ground among those few who know what a German university is; while the reactionary tendency in the opposite direction is becoming equally pronounced. Every reform, however, if it is to prosper, must be a gradual and organic growth. A sudden transplanting of the German university to our soil would probably be a very disastrous experiment. The reasons for this supposition have been quoted often enough, and need not be repeated.

A university was originally a free association of private men who united into a guild or society for the purpose of cultivating the sciences. They were at first mostly mature men, and, as long as they enjoyed no recognition from the state, had full liberty to arrange their affairs as they pleased. Usually it was the fame of some great teacher which drew them together, and the pure love of knowledge, for its own sake, which made them submit to the self-imposed restraints with which they gradually burdened themselves, as they grew in numbers and the necessity of organization became imperative. A kind of conventual life naturally grew up among these devotees of learning, and celibacy, although not always enforced, became the rule among them. They assumed a dress or uniform of their own, usually of a semi-clerical cut; and a strong *esprit de corps* asserted itself within their organizations. They were really literary monks, separated by their exclusive pursuit of knowledge from the great herd of Philistines who had no

spiritual interests, no thoughts beyond the narrow horizon of their daily round of toil. As bequests of money and real estate multiplied, and the associations grew in power and usefulness, the kings began to favor them, adding to their wealth, and investing them with certain rights and privileges, of

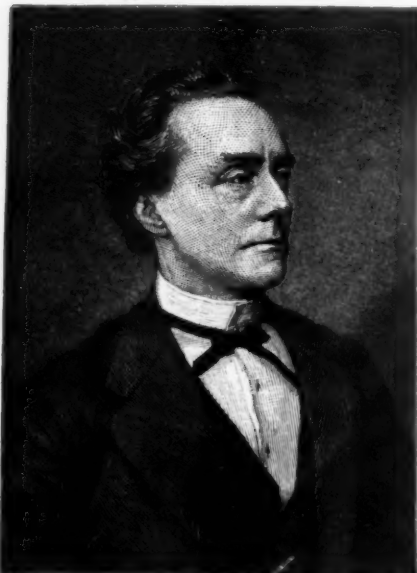


KARL RICHARD LEPSIUS.

which they were to have the exclusive enjoyment. Among these were separate and independent jurisdiction and the right of conferring degrees. The graduates, whether they remained at the university or not, regarded themselves always as members of the university, and asserted their influence in the management of its affairs. If they continued to reside within the college walls, they were intrusted with the supervision and instruction of the younger members, and could thus insure the maintenance of their own policy or the continuance of their own school of thought, long after both were historically superannuated.

This accounts, in a great measure, for the extreme conservatism of the European universities, both in mediæval and in modern times. The majorities in the faculties almost

invariably belonged to a defunct school of philosophy and science, and the advanced few frequently found themselves ostracized, or their hands and tongues tied by the vote of the majority, with whom every final de-



ERNST CURTIUS.

cision rested, except in matters where the state reserved for itself the right to interfere.

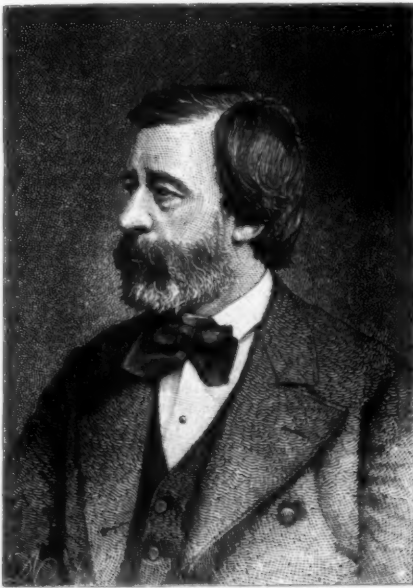
It need not, therefore, occasion much surprise that, in the great battles of civilization during the past centuries, the universities have usually taken their places in the rear, and when the victory of the one or the other tendency has been decisive, they have yielded, half reluctantly, to external pressure, and have changed their methods of instruction in accordance with the demands of the times. Many examples might be quoted to prove this assertion. In the fifteenth and sixteenth centuries, while scholasticism, with its artificial formulas and hairsplitting definitions, was firmly established within the various faculties, the most prominent humanists, like Ulrich Hutten, Agricola, Reuchlin, and Melancthon, were denied the privilege of lecturing in many German universities; and it was, in most cases, the command or persuasion of the secular rulers which compelled the professors to recognize them as colleagues. In 1511, Hutten was forbidden to teach Latin and Greek prosody by the rector (president) of the University

of Vienna. The popes, who feared the humanists as probable heretics, had authorized the theological faculty to keep a strict supervision over professors and students, and to punish or expel every one who was suspected of teaching or cherishing heretical opinions.

In Heidelberg the humanists had a similar reception. To be sure, at the suggestion of the Elector Philip, Agricola and Reuchlin were permitted to lecture there for a short time; but the faculty refused to recognize them. It even opposed the founding of a professorship of Greek literature. In 1511 it denied Melancthon the degree of *magister artium*, on account of his well-known hostility to scholasticism.

The Reformation, although it counted many adherents among the German professors, was, nevertheless, violently opposed by the most prominent faculties, even in North Germany. "The universities and the pope," says Luther, in a letter to Spilatus, "will, you may be sure, either make no declaration or declare against us." In Wittenberg, where Luther held a professorship of theology, his mighty influence, of course, did not fail to assert itself. And in Vienna, where Paulus Speratus, in 1524, preached against the old scholastic methods, the Reformation is said to have found much favor within the university. But the repressive decrees of the Emperor Ferdinand and the vigilance of the Jesuits prevented the further spread of heretical opinions. At Erfurt the Catholics regained their ascendancy after the peace of Westphalia. Frankfurt-on-the-Oder testified its sentiments toward the Reformation by conferring the degree of doctor of theology upon Tetzel, the notorious dealer in absolutions. Rostock remained passive, and only after the most obstinate struggle Leipzig yielded to the government decree demanding its acceptance of the evangelical faith. Heidelberg refused to obey the command of the Elector, which required of the faculty that it should test the soundness of the new doctrines, and it was not until 1557, when the public opinion among the students loudly demanded a change of policy, that the academical authorities saw fit to accept Melancthon as a university teacher.

Protestantism, when it had once gained a foot-hold in North Germany, naturally regarded itself as the final result of human progress, and began with more or less success to repeat the tactics of its predecessors. The Protestant professors, like the Catholic



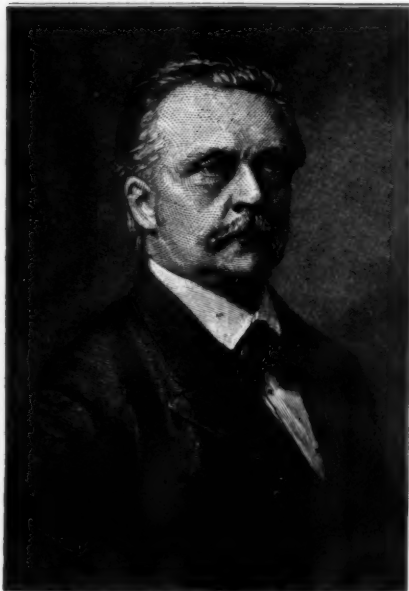
HERMANN GRIMM.

ones, held it to be their first duty to watch over the orthodoxy of their colleagues and students, and the pursuit of learning, apart from its bearing upon theology, became a secondary consideration. The Pietistic movement, although its leaders did not object to a single Lutheran doctrine, but aimed merely at a revival of the religious life within the church, was ridiculed, sneered at, and sometimes attacked even with sterner weapons. Ecclesiastical history and Biblical exegesis were rarely taught, while a vast deal of energy was wasted on doctrinal ingenuities and polemical discussions. Spener, the Pietist, relates that in his youth a student of theology might spend five or six years at a university without having heard one lecture devoted to the interpretation of Scripture. Francke even goes so far as to assert that while he studied in Leipsic a Bible was hardly to be had of any bookseller in the city. And yet the Bible was blindly accepted, and a critical examination of its language condemned as a sin against the Holy Ghost. That the New Testament was not written in classical Greek very few would admit, and when more advanced scholarship had established this fact beyond a doubt, the faculties boldly stultified themselves, and declared that the New Testament spoke a language of its own, and was subject only to its own laws.

The narrow and short-sighted conservatism which discouraged independent research naturally excluded bold and original thinkers from the university faculties. It is especially notable that in Germany, until the beginning of the present century, the majority of scientists, inventors, and philosophers whose names the nation honors, have either had no connection, or only a very brief one, with the great schools of learning. Kepler struggled with poverty all his life long, and did finally obtain a miserable position without salary at the university of Rostock. Copernicus was canon at Frauenburg. Otto Von Guericke, the inventor of the air-pump, was a councilor in Magdeburg. Spinoza lived and labored in philosophic seclusion, and was obliged to refuse a professorship at Heidelberg because full liberty of expression was denied him. The philosopher Wolff was, indeed, a professor at Halle, but he was banished because in a lecture he had compared the moral code of Christ with that of Confucius; he was, however, allowed to return later. Fichte, having been expelled from Jena, was well received in Berlin. Many more examples might be quoted to show that the universities have satisfied themselves with dispensing the fund of learning already accumulated by the past, and that while



RUDOLF VIRCHOW.



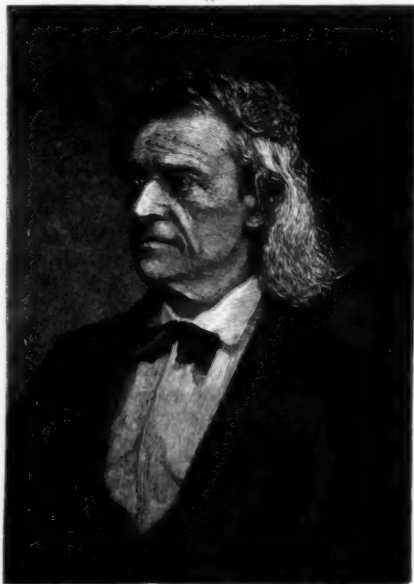
HERMANN LUDWIG HELMHOLTZ.

in accomplishing this work they have rendered invaluable services, they have, as a rule, assumed a hostile attitude toward the champions of independent thought.

When, therefore, the rumor spread in the first years of the present century that King Friedrich Wilhelm the Third intended to found a new university at Berlin, a number of prominent scholars, connected with already existing universities, seized the opportunity to present their views concerning the disadvantages of the old system, and the reforms which they believed necessary to insure their permanent abolishment. All were convinced that the German universities had in the past failed to fulfill the highest purpose of which they were capable, and that the only way to infuse vitality into the new institution was to found it, without regard for tradition, upon entirely new principles which should embody the latest results of modern experience.

The first effort of the king, when the resolution to found the university was irrevocably taken, was to secure the co-operation of as many great and important men as possible. He knew that one or two such men would add more to the fame and usefulness of his university than a hundred conscientious routine men. He was convinced that Fichte was such a spiritual force, and he did

not therefore allow himself to be frightened by the expulsion from Jena or the accusation of atheism. Among theologians, Schleiermacher had gained a great reputation as an eloquent author of liberal opinions, and more especially by his efforts to reconcile Christianity with the latest results of science. When Napoleon suspended the University of Halle, which had displeased him, Schleiermacher lost his position as professor of theology. He had thus a double claim to consideration on the part of the government toward which he had in such dangerous times testified his loyalty. Among jurists, Savigny was the greatest name, and he was accordingly invited to accept a seat in the faculty of law. It was on the same principle that Hufeland, the physician-in-ordinary to the king, and a man equally prominent in practical philanthropy and in theoretic science, was offered a professorship in the medical faculty. An effort was also made to secure the permanent services of Wilhelm von Humboldt, whose philological and æsthetic writings had proved him a scholar of extraordinary versatility and thoroughness. No one had taken a livelier interest in the affairs of the university than he, and there is no doubt that it was he who, in his diplomatic capacity as minister of instruction, finally made an end of the king's



THEODOR MOMMSEN.

wavering and persuaded him that the founding of a new school of learning was both pecuniarily a practicable undertaking and, moreover, a necessity of the times.

In the many documents relating to the university which were from time to time laid before the cabinet, we find this thought repeatedly emphasized that Germany needed an intellectual center, and that this center could and must be nowhere except in the political capital. If young men from all parts of the Prussian dominions could be induced by the superior advantages of the capital to come here to pursue their studies, their petty provincial pride would be gradually rooted out and give place to a nobler and worthier patriotism embracing the whole German land and nationality. Thus the university was to further the great thought of German unity. For it is well known that it was a statesman of those days, the Minister von Stein, who laid the foundation for the work which Bismarck is now accomplishing. And yet, strangely to say, von Stein was not favorably disposed toward the plan of founding an institution of learning in the capital, and his temporary retirement from office in 1808, owing to Napoleon's persistent hostility, was among the circumstances which hastened the realization of the long-considered and much-debated project.

Although it was not until August, 1809, that the cabinet resolution definitely establishing the university was issued, the institution may be said to have existed *de facto* since the winter of 1807-1808 when Fichte delivered his thundering "Orations to the German Nation" (*Reden an die Deutsche Nation*). Berlin was then yet in the power of the French; the French grenadiers paraded the streets, and the rattle of their arms and the sound of their drums could be heard through the windows from the hall where the fearless professor was lecturing. He tried to rouse the German people from their hopeless apathy; he appealed to all their tenderest memories, to their patriotism, to their pride, and his words re-echoed far and wide and rekindled the slumbering enthusiasm for the Fatherland. He prepared the way for the war of liberation, awakening the sentiment which then burst forth mightily, sweeping the foreign armies from the soil. When he ventured to publish his stirring philippics, Fichte received a warning from the Minister von Begme, to which he proudly answered: "I know that a ball of lead can kill me, as it did Palm, but it is not that I am afraid of; for the end for which I labor

I am also willing to die,"—no meaningless boast, indeed, in those days when the life of a German offender was held to be of small account in the eyes of the French conqueror.

The university was opened in October, 1810. The organization which was finally adopted differed but slightly from that of the older German universities; although a number of radical changes proposed by Fichte and Wolf were respectfully listened to by the minister and the commission, they were in the end rejected. The academic constitution which, after prolonged debate and a careful study of the workings of the system at Leipzig and Göttingen, gained the approval of the government, contains the following regulations: The teachers of the university shall be divided into three degrees; ordinary or full professors, extraordinary, or assistant professors, and *privatdozenten*—for which no English equivalent exists. The professors are appointed by the state, and it is their duty to give a certain number of lectures during the academic year. The members of the Prussian Academy of Sciences shall also have the right to deliver lectures at the university if they desire it. Every professor may lecture on any subject he chooses within his own faculty; he may also lecture on subjects outside of his own specialty if he possesses the degree proving proficiency on the chosen subject. Every ordinary professor takes part in the deliberations by his faculty,* at the head of which is a dean. The highest officer of the university is a *rector magnificus* who is elected annually by the ordinary professors from their own number. The deans of the four faculties form with the rector, pro-rector (the rector of last year) and the university judge, the academic senate, within whose jurisdiction everything belongs which concerns the university in general. Its decisions are made by a majority of votes and the rector is presiding officer. In minor matters, involving breaches of discipline, the rector may punish the delinquent without consulting the senate. Punishments exceeding four days' prison can only be ordered by the senate.

It will be seen from the above that inde-

* The four faculties of a German university are theology, medicine, law and philosophy. The professors representing all these departments form together a governing body, corresponding to what we would call the faculty. I have been obliged to use the term, now in its German and now in its American sense—but the meaning is in every instance explained by the connection.

pendent jurisdiction was accorded to the new institution in spite of much opposition on the part of individual professors. The feeling seems to be general, at least among those of the professors whom I have the honor to know, that it is an entirely superfluous right,—a remnant of mediæval times which will probably disappear before many years.* One learned gentleman with whom I lately discussed this point thought, however, that it was a great convenience to the students to have their quarrels among themselves and their occasional fights with the police judged by a mild and humane tribunal like the academic senate; it was a very humiliating thing to be dragged up before a police-court and to have the proceedings published in the newspapers the next morning. He was especially anxious to impress upon my mind that in German society it was regarded as a great disgrace to have been fined by an ordinary police-court or to have endured never so brief a term of imprisonment at its dictation, while a couple of days in an academic *carcer* was an experience which a man would look back upon in his old age with fond regret, as something that rather belonged to student life, and without which one's youth would not have been complete. My informant seemed to regard it as an inalienable right of students to thrash a night-watchman if they could, or to be thrashed by him if he happened to be the stronger. These feats were held to be about equally glorious, and one of the chief charms of academic life would be destroyed in case an eternal peace was concluded between students and police, which would inevitably be the case if the university were deprived of its independent jurisdiction.

A student who is called up before the rector or the senate is always treated as a gentleman. He is addressed with extreme courteousness, and is made to feel his own dignity, which, perhaps, in a freak of boyish exuberance of spirits, he had forgotten. He is not, as is so frequently the case with American faculties, bombarded with questions from all sides, cross-examined with an evident purpose to confuse and entrap him, and in the end treated to a long-winded moral exhortation, containing the usual professional platitudes. I have conversed with a number of students, both in Leipsic and in

Berlin, who have received "special invitations" from the rector, and I have never discovered in them any trace of that petty spite and animosity toward their instructors which in many of our American colleges is so deplorably prevalent. American students, it may be urged, are often mere boys; at all events, as a rule, they are younger than the German. They do not understand their own welfare, and therefore waste much of their time and energy in playing tricks on one another and on their teachers. This is undeniably true; but it is only half the truth. The fault lies as frequently with the teachers themselves. A man who sits year after year at a desk, droning out the same commonplace lectures, interspersed with feeble jokes, or hearing lessons in a half-mechanical way, even if his moral character be never so estimable, can hardly chain the attention of twenty or a hundred lively young men, overflowing with animal spirits. He is merely a school-master, and school-masters have proverbially a hard time in trying to enforce discipline.

Then again, the American professor is too often, in our smaller colleges, a man who has failed in some other pursuit, and falls back on teaching as a last resort. Real scholarship, in the German sense, has certainly been the exception, and respectable mediocrity the rule. No one has ever thought of demanding prominence as an original investigator as a necessary qualification for a professorship. We have, of course, scholars of this order at three or four of our colleges; but, as the public understand it, the duty of the instructor is to communicate the accumulated traditional lore of the past, not to be laboring in the vanguard of pioneers, on the outermost boundaries of science. And here lies the difference between the German and the American (or, indeed, the English) idea of a university teacher. The Germans hold that a man of the latter order is more valuable to an institution of learning than any number of ordinary, respectably educated, routine teachers. He fills his students with enthusiasm for his science; he stimulates them to follow in his footsteps; their daily contact with him often makes the decisive epoch in their lives, and in after years the memory of him remains a living presence and an inspiration.

It is not an exaggeration when I say that hardly any institution in the world counts at the present time so many great names within its faculties as the University of Berlin. Mommsen, Curtius, Helmholtz, Grimm, Vir-

* Since writing this I have been informed that a law has already been passed abolishing the jurisdiction of the German universities of Berlin from October 1st, 1879.

chow, Leopold von Ranke, Lepsius, Gneist, Zeller,—what a fund of talent, strength, and spiritual vitality is represented by names like these! Each one of these men has broken a pathway for himself into the unknown, and has extended the sphere of human knowledge. They do not look upon themselves merely as teachers of youth; their first allegiance is to their science. And the government takes the same view of their position, and encourages them by granting them leisure and frequently pecuniary help for independent investigation. It is safe to assert that no one can now obtain a professorship at the University of Berlin without being a man of unusual power and energy. The system of selection provides, so to speak, only for "the survival of the fittest," and those of the competitors who are insufficiently equipped for the intellectual contest disappear from the arena and drop into inferior positions. It is well known that, besides the professors, a great number of *privatdozenten* (private instructors) are permitted to lecture at the German universities. These private instructors are graduates who, after having gained some distinction during their college career and obtained their doctorate, aspire to professional honors. They have no regular salaries, but manage to eke out a scanty living by the lecture fees they obtain from the students, by giving private instruction, and frequently by writing for scientific periodicals. The fact that their names appear in the university catalogue is looked upon as a kind of official indorsement, and is in itself a guarantee of thorough scholarship. They devote their time largely to study and experiments in some special branch of science which has hitherto received insufficient attention, and in which there is, accordingly, yet a chance of making a name. A great deal of conscientious and valuable labor is done by these men, chiefly in the way of collecting minute facts and observations, though frequently of a more boldly experimental kind. What is especially worthy of notice is that the German universities are thus constantly educating a whole army of workers who, from motives of ambition or from a true love of knowledge, spend the better part of their lives in the service of science. Such a class of people, whether they reach the goal of their ambition or not, cannot fail to exert influence upon the spiritual life of the nation, especially as their number is rather larger than appears from the academic calendars. According to this latter authority, they number

in Berlin at present about eighty, while the whole body of instructors exceeds two hundred (1877-78, two hundred and fourteen). Of these, one hundred and five constitute the faculty proper, and have the title of professors, viz.: sixty-three ordinary and sixty-two assistants. The *privatdozenten* have no seat or vote in the deliberations of the faculty.

The practical workings of this system I had ample opportunity to observe during a previous sojourn at a German university. When a professor is inclined to take his ease, and fails to give satisfaction, the students desert him, and go to one of the *privatdozenten*, who lectures on the same or a kindred subject. And, as the professor is largely dependent upon the lecture fees which he receives from his students, such a desertion is apt to stimulate his lagging energy and induce him to exert himself to the utmost. There is, of course, no attempt made to control the attendance of undergraduates upon lectures, and every one is at liberty to seek knowledge wherever he chooses. The only thing which concerns the university is whether, in the end, he has acquired the amount requisite to pass his examination, and of this the examination itself is a sufficient test. During the first years after the foundation of the University of Berlin, a feeble effort was made to regulate the attendance; the professor now and then passed a paper around, without previous notice, and requested all who were present to sign their names upon it. It is needless to say that they signed not only their own names, but also those of their absent comrades. And the professor found, moreover, to his astonishment, on glancing over the names, that Seneca, Æschylus, Socrates, Cicero, and other distinguished strangers had been among his audience.

At the University of Berlin, the lectures of *privatdozenten* are, as a rule, rather scantily attended compared to those of professors, probably because almost every department of learning is represented by men of such conspicuous ability and fame that it is hopeless for a comparative beginner to enter the lists with them. What, for instance, could a new-fledged doctor have to say on the subject of Roman history, which in interest and authority would even remotely approach a lecture by Mommsen? What young physicist could hope to draw students away from Helmholtz? Whose word would be more weighty concerning the antiquities of Greece than that of Ernst Curtius, the ex-

cavator of Olympia? But at other universities where the old pedantic type of professor, prodigiously learned and prodigiously tedious, is not yet extinct, I have known instances of *privatdozenten* gradually making the professor entirely superfluous. If at our American colleges we would introduce some modification of this system adapted to our civilization, we should soon see the amiable and incompetent instructor replaced by wide-awake and adequately equipped men. A free and unlimited competition would hardly be commendable, as students are with us not always the best judges of real competency and soundness of scholarship; but a competition among men whose scholarship had been tested and whose character furnished a sufficient safeguard against mere hunting for cheap popularity by clap-trap devices, could not fail to have the most beneficial results. Those who have reason to fear for their own heads, will doggedly oppose "all baneful German innovations," and others, no doubt, who would gladly measure strength with younger rivals, may, from an honest distrust of whatever comes from Germany, fight against this timely reform.

The faculty is, of course, continually being recruited from the body of the *privatdozenten*, although there is no rule obliging a university to fill its vacancies in this manner. Very frequently the government, with the consent, or at the recommendation, of the academical senate, invites some well-known foreign scholar to accept the vacant place; but as far as I can learn from the statistics of the University of Berlin, the majority of the faculty have been chosen from the *privatdozenten*. The senate practically has the appointments in its own hands. As soon as a vacancy occurs, the rector, in the name of the senate, sends in the names of three candidates as especially worthy of consideration. Each name is accompanied with a recommendation, while the preference of the academical body is also respectfully indicated. The *Kultus-minister* (the minister of public worship and instruction) then appoints one of these candidates, and almost invariably the one whom the senate has declared to be its choice. Strictly speaking, the government is not bound by any law to accept the advice of the university, but practically a well-established precedence is equivalent to a law. A deviation from this method of appointment would be an unheard-of thing in Prussia. If the government were to reject all the names presented by the senate, it would naturally be construed as a wan-

ton challenge to the university, and as the university is a powerful institution, having many of its members both in the Prussian and in the German parliament, the minister would undoubtedly before long have occasion to repent of his rashness.

In American colleges the methods of appointment differ somewhat in the different states. The board of trustees—in most cases a very miscellaneous body, consisting largely of men who have no idea of what a university is or ought to be—come together and deliberate concerning the needs of the institution. In matters of appointments they usually act on the recommendation of the president and accept his candidate, which is, on the whole, the nearest approach to the Prussian system which we can hope to see realized. In the Western states where trustees are mostly selected for their wealth and presumable willingness to endow the needy university, friends and protégés of these gentlemen offer themselves to teach half a dozen branches with equal willingness, and the president, who is afraid to alienate a future endower, gives the worthless polyglot his recommendation for a professorship. Of course, this criticism in no wise applies to colleges like Harvard, Yale, Cornell and Michigan, where the alumni of the institution have now, or before many years will have, a majority in the board of trustees. It is a very curious notion, however, which seems to be prevalent among us, that professors, who certainly know the needs of a university better than any one else, and have its interest more at heart, must be excluded from all direct participation in its government.

There are at present from thirty to forty American students at the University of Berlin. Many of them are regularly matriculated, and are studying for the degree of *philosophiæ doctor*, while others merely attend special lectures, with the consent of the professor. One celebrated member of the faculty, whose word ought to have great weight, assured me that they were, as a rule, earnest and energetic men, with whom it was a great pleasure to work. If they come here for the purpose of devoting themselves to science, their previous training (provided they are graduates) is found to be quite sufficient, and there are among them many excellent mathematical heads. In philology they are at a disadvantage, because they have passed through no preliminary course of training approaching in completeness and thoroughness that of the German

gymnasium. Moreover, in the so-called *Seminarien* (private exercises in the professor's house or elsewhere) Latin is frequently spoken, and in the classical ones exclusively. It is delightful to hear with what fluency Professor Vahlen, who conducts the *Seminar* in classical philology, speaks the Ciceronian tongue. He enunciates with great distinctness, as if he gloried in the very sound of the words, and liked to dwell on them. His students also express themselves with apparent ease, and answer the questions he addresses to them without much hesitation, and in Latin—usually grammatically correct, but rather destitute of the classical flavor. Of course the American student who has reached even this degree of proficiency is a phenomenon, and he who despairs of ever reaching it is apt to quit the *Seminar* with a discouraged air, and vow that he will never again look into a Latin book.

Professor Vahlen is a thin and bony man of about fifty, with a pair of piercing eagle eyes, and a lean but very impressive face. He reads and translates his author from the *cathedra*, and intersperses his critical and grammatical remarks as he goes along. Like most German professors, he dwells with preference on the philological phase of the text, and illustrates it abundantly with historical and philosophical comments. He seems rarely to regard his author from a literary point, although he reads with warmth and animation as if he really felt the beauty of the passage, which in the next moment he dissects with admirable keenness and accuracy. He takes a strong personal interest in those of his students who in any way distinguish themselves, and is especially kind and considerate toward foreigners.

As regards the expediency of employing Latin as the language of lectures and other academic exercises, the opinions of the members of the Berlin faculty seem to be divided; most of those with whom I have conversed on the subject agree that it is a useless mediæval tradition, and that the sooner it is done away with the better; but they believe that this can only be done gradually, and are therefore opposed to all sudden and sweeping changes. It is, however, merely a question of time when the reform will be finally accomplished. At present, all lectures, with a few notable exceptions, are delivered in German; but until very recently, the so-called *Antrittsrede* (inaugural address) of a *privatdocent*,

no matter to what faculty he belonged, had to be delivered in the classical tongue. A scientific lecturer, whose inaugural address required the most modern terminology, naturally found this rule extremely inconvenient; and if, as was often the case, he had to illustrate his theories by experiments, the difficulty was doubly increased. Dissertations in philology (German, classical and Oriental), ancient history and ancient philosophy must still be written in Latin, as also the dissertation for the licentiate degree in theology. Candidates for the degree of doctor of philosophy are permitted to write in German, but are then obliged to pass an extra examination in Latin afterward. A number of American students who have studied in Berlin, but who are unable to conform to this requirement are thus obliged to take their doctorate at Göttingen, or some other university where the rule is not enforced. Helmholtz, the present * *rector magnificus*, and nearly the whole scientific portion of the faculty are strongly opposed to these regulations making the study or use of Latin obligatory upon scientific students after their admission to the university, and there is every reason to believe that all such regulations will soon be abolished.

As I have said, the strength of the Berlin University lies chiefly in the fact that it counts so many great and renowned men within its faculty. Among these no one is more conspicuous than Hermann Ludwig Helmholtz, professor of physics, of whom it is said, with justice, that he has made an epoch in every branch of science to which he has devoted himself. He is a man of about fifty-seven, rather below middle height, and somewhat inclined to stoutness. His face is decidedly handsome; the brow especially of remarkable spaciousness and breadth, and all the features clearly modeled and in good proportion. His grave dark eyes express calm and keen observation; they are undeniably a trifle cold, and probably judge men with the same merciless, mathematical exactness with which they observe other natural phenomena. One can hardly imagine a more unsentimental, passionless face, nor a fitter face for a man of science. One feels at once that his mental atmosphere must be clear and bracing, and unobscured by fogs of sentiment. I find also that in social circles Helmholtz has the reputation of being an interesting but a cold

* Academic year 1877-78.

and unapproachable man. However, the students, who work in his laboratory and thus come into closer contact with him, cherish the profoundest respect and admiration for him. One of them, a young American, who has studied physics in Berlin for three years, told me that during all this time he never remembered that the professor had addressed one personal question or remark to him, not even as much as a comment upon the weather. Every morning, when Helmholtz enters his laboratory, he greets the young gentlemen, and then immediately begins to question them successively in regard to their work. He explains with admirable clearness and ease, and when an interesting point comes up for discussion, he has been known to spend an hour or more with one student in trying to elucidate it, sometimes even forgetting his lecture hour. His language is always mathematically precise, and the most abstruse and involved theory becomes as simple as the multiplication table before he has done with it.

The remarkable discoveries of Helmholtz in the most various departments of science are universally known, and may be found in every encyclopedia. His fame dates from the publication of his treatise "On the Conservation of Energy," which was only the forerunner of a long series of equally brilliant labors in optics, acoustics and physiology. If he may be said to have any specialty to which he devotes himself by preference, it is the physiology of the senses. Here his philosophical profundity, combined with mathematical exactness of thought, have produced the most significant results. It will be remembered that it was he who succeeded in ascertaining the speed with which sensations were communicated through the nerves of animals and men; it was he too whose experiments in acoustics (*Die Lehre der Tonempfindungen*) established the scientific proof for the musical theory of harmony, and, above all, it was he who invented the ophthalmoscope, an instrument by which light is thrown upon the background of the eye, so that the retina with its web of nerves and blood-vessels may be distinctly observed. The nature of a disease in the eye may thus be ascertained and the sight of thousands saved, who otherwise might have become the victims of false conjectures and experiments. It is needless to say that Helmholtz is an excellent lecturer. He does not aim to be eloquent, as indeed eloquence would

be out of place; but he is clear, concise and impressive.

Among the scientists of the university, Rudolf Virchow, professor of general pathology and therapeutics, probably ranks next to Helmholtz. He is a restless and energetic man, who extends his activity in many directions, and has accomplished much solid and valuable work. As a physiologist he is especially known by his great work on cellular pathology (*Cellulärpathologie*); and of late he has turned his attention toward anthropological studies, and has published a voluminous work, concerning the value of which I am not competent to express an opinion. Professor Virchow's political career, which has extended over many years and brought him many reverses, is so variously judged that it is hard, among the many conflicting opinions, to arrive at an independent judgment. It appears, however, that the professor has at all times stood up boldly and bravely for what he believed to be right, and has refused to keep silent when prudence or regard for higher authority might have made such a course expedient. In consequence of this irrepressible bravery, Virchow, who was with many other excellent and patriotic men involved in the political movement of 1848-49, was deprived of his professorship by the reactionary government, and was not reinstated in his former position until 1856. Since then he has taken his place in the Prussian *Landtag*, and has played a significant rôle as one of the leaders of the so-called *Fortschrittspartei* (party of progress). He is in no sense an eloquent speaker, but bristles with facts and statistics, and delivers many a valuable argument which presents a much better appearance in the newspaper than on the floor of the house. As a lecturer on medical topics he is said to be very successful, and often inspires his students with his own enthusiasm for his work. It is especially owing to him that the Pathological Institute of Berlin has been so admirably fitted up and affords such fine opportunities to young doctors for independent scientific research.

Another famous professor, who, like Virchow, has had to suffer for his political independence, is Theodor Mommsen, the author of the history of Rome. He was, previous to the revolution of 1849, professor of jurisprudence in Leipsic, and traveled from 1844-47 in Italy, partly at the expense of the Berlin Academy of Sciences. On his return, the ardor with which he expressed his liberal sentiments made him suspected

by the government, and he was deprived of his office. He then for a time edited a paper in his native province, Schleswig-Holstein, became professor in Zürich, but was in 1857 appointed to the chair of ancient history at the University of Berlin. In the Prussian parliament he has occupied a conspicuous position as one of the ablest and most honored members of the National Liberal party.

It cannot be denied that it gives one a peculiar satisfaction to know how a famous man looks. I have not infrequently found that an author's eyes, gestures and facial expression furnished the exact commentary I needed for the complete understanding of his books. Thus the passionate partisanship which characterizes Mommsen's Roman history; his love of Cæsar, his hatred of Cicero, and more especially the intensely modern spirit in which he deals with ancient events, will perhaps be in a measure explained by the study of the historian's own personality. His most prominent feature is a pair of piercing gray eyes, with which he is apt to regard you sternly over his spectacles, while he converses in a gentle, deliberate manner which almost takes the edge off the severity of his glance. You are not surprised to know that he has the reputation of saying the sharpest, most biting things in the calmest tone, as if they were mere truisms. There is a gleam of fanaticism lurking in his features,—a suspicion which is confirmed by his whole career as an author and a politician. His face is that of a scholar, but it indicates primarily a man with strong beliefs and conviction, and with the keenest power of observation. The *tout ensemble* of his features has an intensity of expression which is rarely seen in a modern man of his position. I have met similar types, deducting the scholarly refinement and finish, among religious fanatics in the West. But to complete the professor's portrait: his large forehead is covered with a net-work of wrinkles and surmounted with an abundance of gray hair, which is worn long, reaching down upon the neck. It may be of interest to know that he has fourteen children, of whom a large majority are daughters.

The weakness of Professor Mommsen's voice makes it difficult, in the moment, to value his lectures at their full worth. I should give any young man who intended to study history under him the advice of Mephistopheles to the student in "Faust":

"But take thy notes as zealously
As did the Holy Ghost dictate to thee."

In dealing particularly with Sulla, Marius, Cicero and Cæsar, and the whole period of the decline and fall of the Roman republic, Mommsen displays an eloquence which, on paper, looks as magnificent and imposing as from the *cathedra* it sounds dry and unimpressive. And yet there is a sharpness and delicacy of characterization in the portraits which he gives you of the great Romans, and a certain charm of complete intelligibility with which he invests their motives and modes of action, which, once heard (or rather seen), is never forgotten. These are, of course, the same qualities which have made his Roman history renowned, but Mommsen is not the man to fall back upon his early achievements; he is yet laboring with inexhaustible energy and force, and gives his students always the latest results of his investigations.

Almost a contrast to Mommsen, both in personal appearance and in his tendencies as a scholar, is Hermann Grimm, the son of Wilhelm Grimm, the younger of the two famous brothers. Hermann Grimm's literary affiliations were in his youth with the Romanticists, whose atmosphere he breathed, and who gave the first coloring to his ambition. He even married, so to speak, within the Romantic school; his wife being the daughter of Bettina Brentano, "Goethe's child-love," and Achim von Arnim, the author of "Countess Dolores" and many other nightmarish and blood-curdling tales. Grimm, however, has with every year removed himself more widely from the traditions of the school, until now only the faintest tinge of Romantic moonshine may be felt, rather than seen, lingering over his pages. As a novelist, he excels by the fineness with which he draws the most fleeting, intangible moods and the finest *nuances* of character. Among his shorter tales there is one entitled "The Child," which gives evidence of a remarkable gift of psychological observation. His longest romance, entitled "Invincible Forces," contains many vivid descriptions and remarks of extraordinary fineness and force, but seems to have no firmly knit skeleton, strong enough to keep the whole elaborate structure erect. It is an excellent book, without being an excellent novel. The American heroine, I am afraid, would find it hard to convince her countrywomen that she had ever seen New York or Chicago. It is well known that Grimm has always taken a lively interest in American affairs, has done much toward introducing our best authors

in Germany, and has himself translated the greater part of Emerson's essays. For Emerson he entertains the heartiest veneration, and speaks with enthusiastic appreciation of the loftiness of his character and genius.

It was, however, not his attempts in fiction but his early prominence as an art critic which led to Grimm's appointment as professor of the history of art at the University of Berlin. His volumes of "Essays," dealing with subjects relating to art and literature, have already become classics, without which no German library is complete; they are written in the purest style, with a warmth of sentiment and a delicacy of perception which are beyond all praise. His "Life of Michel Angelo" (the only work of Grimm's which seems to be generally known in the United States) is, properly speaking, a history of the Renaissance itself with Michel Angelo for its chief and central figure. It is a marvelously attractive book,—a book charged with warm vitality. Like all that Grimm has written, it has a decided individuality; it arouses in you the desire to know the author. Grimm, the professor, has the same lovable and delicately constituted personality as Grimm, the author. In his lectures on Goethe, for instance, now published in two handsome volumes, he displays a power of characterization and of sound æsthetic judgment which is rarely found in an academic *auditorium*. It is this varied endowment—creative ability coupled with keen critical discernment—which constitutes the perfect university teacher. None but he who has himself felt the creative joy (*die schaffende Freude*, of which Goethe speaks) can enter sympathetically into a poet's soul, follow his development, judge of his actions, and worthily interpret his works. It is this which Grimm has done, as no one else before him, in his "Lectures on Goethe," and which he has been doing for a long series of years in relation to many other artists and poets whom he has interpreted to his students, from his *cathedra*. Personally, he is no less attractive than he is as an author. He is a tall, well-formed man with a fine, expressive face. You cannot talk long with him without being impressed by the healthy naturalness and fineness of his thought; you discover at once that he is a man of delicate senses. He has suffered much from illness during recent years and looks nearly ten years older than he did in 1873.

Among the other celebrities of the university, the Egyptologist Karl Richard Lepsius is one of the foremost. He is a man of very

striking appearance, but in spite of his vast learning he is rather dry and a little wearisome as a lecturer. His fund of facts and his knowledge of details are so enormous that he seems to find it difficult to master them. He gives you much that is interesting, but in a rather uninteresting manner. The astonishing acquirements of the man, of course, inspire you with unbounded respect and make his utterances absolutely authoritative; but, for all that, a listener of a literary turn will be apt to spend a good deal of his time in imagining how much more beautiful and impressive these marvelous facts would have been, were they presented with a slight *afflatus* of eloquence. But I find it is a tradition in the German universities that regard for style is unworthy of the serious consideration of a scholar, and that eloquence is a mere clap-trap substitute for the solid virtues of scholarly soundness and profundity. It thus happens that men of exceptional intellectual endowments, as, for instance, the former university preacher, Professor Steinmeyer, adopt a style of address which impresses one as a fraction of the confusion of Babel. Professor Steinmeyer writes most excellent sermons, but he delivers them with a studious disregard for commas and periods, and with inflections which must have been borrowed from some strange barbaric tongue. It is needless to say that the students do not manifest much eagerness to listen to such preaching; I find that a great number of them are not aware that a university preacher exists. The government, possibly because it failed to appreciate Professor Steinmeyer's style of rhetoric, seized the opportunity, during a recent illness which brought him near death's door, to appoint his successor. This act of discourtesy immediately stimulated all the professor's latent vitality and he hastened to recover; the government was forced to recognize the fact of his existence, and in order to avoid difficulties, established a new theological professorship, or divided the duties of the old one between the two claimants.

But to return to Lepsius. I did not intend to compare his manner of speaking with that of his theological colleague. I only ventured to express the opinion that grace of style and an occasional approach to eloquence are not necessarily proofs of dilettanteism. My limited space does not permit me even to mention the long array of valuable contributions to classical and Semitic philology, and especially to the science of Egyptology, which we owe to this

indefatigable scholar. While he was yet a very young man his historico-philological treatises repeatedly gained the prize of the French Academy; in his "Lettres à M. Rossilini" he established the scientific theory for the interpretation of hieroglyphics, and during the years 1842-45 he accompanied a joint English and German expedition through Egypt, and on his return collected the rich results of his researches in twelve superb volumes with 650 plates, published at government expense. He is a man of marvelous energy, and in the various offices which he fills, as director of the Egyptian division of the royal museums, as librarian of the Royal Library, and as member of the Academy of Sciences, accomplishes an extraordinary amount of work.

One of the most popular teachers at the University of Berlin is Ernst Curtius, the author of "The History of Greece." His perfect amiability and *bonhomie* and the elegance and cordiality of his manner could not but endear him to those who come into close contact with him, while his fame as a historian and the profundity of his scholarship inspire something more than respect even in those who meet him only in his lecture-room. Professor Curtius has had from fifty to sixty American students under his instruction; and I may be pardoned for mentioning two whom he remembers with particular pleasure and of whose ability and scholarly acquirements he speaks with much appreciation, viz.: Professor Carter of Yale College and Mr. Keep, the author of an excellent Homeric glossary. In the opinion of Professor Curtius, the majority of American graduates rank with German *Primaries*, or members of the highest class in a gymnasium; they are apt to deal with learned themes in a declamatory and rhetorical fashion, hiding the insufficiency of their knowledge under a sounding phraseology. He did not mean to assert that this was a national characteristic; it was rather the common device of immaturity and indicated some false system or tendency in our preparatory schools.

Professor Curtius has a very agreeable voice and a clear and lucid manner of lecturing; he is frequently in the habit of conducting his auditors through the Greek division of the Royal Museum, and illustrating by the veritable objects, many of which he has himself excavated at Olympia, the manner of life and thought among the ancients. It is needless to add that these peripatetic lectures are very popular, being really

themselves a venerable tradition from the days of Plato and Socrates. You seem to breathe the breath of Greece. These objects—some of them two to three thousand years old—may have been touched by the heroes who came to participate in the Olympian games. Here, for instance, is an urn or pitcher of burnt clay, or terra cotta, the fragments of which Professor Curtius discovered in an Olympian tomb. It has now been carefully joined together, and no piece was found lacking. The form is light and graceful, and the sides decorated with hasty-colored sketches, representing scenes of everyday life. There is the picture clearly drawn, and the colors yet bright and warm. Notice the wonderful grace and the soft distinctness of the few simple lines which go to make up this figure; and these pitchers were made and decorated by common artisans, not by men who laid claim to the title of artists. Imagine, then, what the average artistic culture must have been among a people whose artisans could draw lines like these. The fact that they are not the work of educated artists is proved by various circumstances: in the first place, the material is very cheap; and, secondly, the pitchers are found in great abundance in the tombs of a certain period. They are a kind of mortuary vessels, which were thrown into the grave, and thus purposely broken; the breaking having some symbolism, and being a part of the burial ceremony. In these lectures, whatever Professor Curtius touches is made to tell, not only its own history, but the history of the people who fashioned and used it. Antiquity revives under his hands, and begins to breathe and move in a human and intelligible manner. We feel our own blood pulsing in its veins, our own emotions and passions animating its actions.

It is not to be wondered at that, with such a corps of instructors, the University of Berlin attracts more students than any other similar institution in Germany. The number of regular attendants upon lectures is at present 5,006, of which 2,834 are regularly matriculated, and candidates for university degrees. In Leipzig, where the total number is less (3,163), the number of matriculates is somewhat higher (3,036). The opinion generally prevails in Germany, as abroad, that for any one who intends to devote himself to classical or Germanic philology, the Leipsic University is to be recommended; while a naturalist—or, in fact, any student of the exact sciences—would find it more profitable to go to Berlin.

MEMNON.

WEARY, forsaken by fair, fickle sleep,
 A traveler rose and stood outside his tent,
 That shrouded was in dusky shadows deep
 By palm-trees cast, that o'er it kindly leant.
 A low moon lingered o'er a large extent
 Of lifeless, shifting sands. Her pallid rays
 Had kissed the scorched waste to sweet content;
 And now her farewells whispering, still she stays,
 As loth to leave the land to Phœbus' fiery blaze.

Slowly she sinks; and faint streaks quietly creep
 Up from the east into the dusky sky—
 Aurora's yellow hair, that up the steep
 Streams to the rear of night full breezily,
 Shaken from her flushed fingers, that now dye
 The under-heavens crimson; now she springs
 Full-blown before the day, and hastens by
 With silver-footed speed and yearning wings,
 To kiss a form of stone that at her coming sings.

Thrilled at the sound the traveler starts aside,
 And sees the image, prostrate, half-enwound
 With red unstable sand-wreaths, and its wide
 Forehead, and lips that moved not with their sound
 Celestial, lined with many a furrowed wound,
 Deep graven by the gnawing desert blast.
 Half-buried sphinxes strewed the waste around,
 And human-headed bulls, now moldering fast,—
 Their impious shapes half gone, their greatness wholly past.

Out of this desolation vast and dead,
 Now glorified and clothed in red and gold,—
 Brightness befitting Egypt's Hero's bed,—
 A matin to his Goddess Mother rolled
 From Dawn-kissed lips, that also kissed the mold
 Of their decaying substance. The sweet psalm
 Thrilled in the listener's ears, with manifold
 Cool music mingled of the murmuring palm;
 And accents large and sad deepened the lifeless calm:

"O Mother, stay; thy son requireth thee.
 All day the sun, with massive maddening glare,
 Beats on my weary brow, and tortures me.
 All day the pitiless sand-blasts gnaw, and wear
 Deep furrows in my lidless eyes and bare.
 All day the palms stand up and mock at me,
 And drop cool shade over the dead bones there
 And voiceless stones, that crave no canopy.
 O beautiful Mother, stay; thy son requireth thee.

"O Mother, stay; thy son's heart needeth thee.
 The Night is kind, and fans me with her sighs,
 But knoweth not nor feeleth sad for me.
 Hyenas come, and laugh into mine eyes;
 The weak bats fret me with their small, shrill cries;

And toads and lizards crawl in slimy glee.
Thou comest, and my torturers dost surprise;
And fondlest me with fresh hands, tearfully.
O dewy-lipped Mother, stay; 'tis thy son prayeth thee.

"O Mother, why so quickly wouldst thou flee?
Let Echo leave her mountain rocks, and twine
My words with triple strength to cling to thee,
And clog thy limbs from flight as with strong wine.
Let them recall sweet memories of thine,
Of how the long-shadowed towers of wind-swept Troy
Were dear to thee, and near, whiles thou didst pine
For the god-faced Tithonus; and the joy
Thou drank'st when thou hadst gained the willing kingly boy.

"O Mother, how Scamander chided thee,
And swelled his tawny floods with grief for him,
And drowned his oozy rushes by the sea!
For often have I heard such tales from him,
Thou listening, whilst the purple Night did swim
Reluctant past, and young Emathion hung
Upon thy wealthy bosom. Music, dim
In ears not all divine, the night stars sung
Of thine high origin Hyperion's courts among.

"O Mother, what forebodings visited thee
From the Laconian's ravished bridal bed?
What mists of future tears half blinded thee,
When Ilion's god-built gates, wide opened,
Let in the fatal Spartan woman, wed
To Troy in flames, dogs gorged with Trojan slain,
And tears of thine, Mother, for thy son dead?
Dead! would my soul were with the body,—slain,
Nor stony-fettered here upon this Theban plain.

"O Mother, what glooms darkened down on thee,
And tearful fears made thy scared eye-lids red,
When me thou sawest by some god's enmity
Madly to meet Pelides' fury led,
Sparing the aged Nestor's childless head,
By me made childless. On the Phrygian plain,
Between the bright-eyed Greeks and Trojans, bred
Warriors, I met the Pthian ash in vain,
Which bade my breast's bright wine the trampled stubble stain.

"Then, Mother, weeping thou to Jove didst flee,
And wring thy fingers, and a suppliant
Didst kneel before him, grasping his great knee
And awful beard, and clinging like a plant
Of ivy to an oak; till he should grant
Peculiar honors, not vouchsafed before,
To thy son's obsequies. Nor didst thou pant
And pray in vain, and kiss his beard all hoar,
And large ambrosial locks that veiled the sapphire floor.

"For, Mother, when the ruddy-bosomed sea
Had drunk its fill of fire, and, climbing high,
Smoke of my funeral pyre with savory

Odors of oil and honey 'riched the sky,
 Out of the seething flames a cloud did fly
 Of shrill-voiced birds,—like swarms of swarthy bees
 That move their household gods in young July,—
 And screaming fought and perished, to appease
 My Manes, and fulfill impelling Jove's decrees.

"O mother, hath my song no charm for thee
 To hamper thee from flight? Thou then didst wait
 Scarce till the lustral drops were dry for me,
 And embers parched with dark wine satiate;
 But wast away through the Hesperean gate
 To mourn o'er waters Atlantean. Now,
 Thy loose locks trailèd are in golden state
 Down the far side of yon keen peaks of snow:
 The brazen sun hath come, and beareth on my brow.

"Soon will for me the many-spangled Night
 Rise, and reel round, and tremble toward the verge.
 Soon will the sacred Ibis her weird flight
 Wing from the fens where shore and river merge,
 With long-drawn sobbings of the reed-choked surge.
 The scant-voiced ghosts, in wavering revelry,
 For Thebes' dead glory gibber a fitful dirge:
 Would thou wert here, Mother, to bid them flee!
 O Beautiful Mother, hear; thy chained son calleth thee."

WITH STONEWALL JACKSON.

"ATTENTION to orders!"

It was the evening dress-parade; in an old field beside the Charles City Road, a few miles from Richmond, the bayonets of a Confederate regiment were flashing back the last sunbeams of a midsummer day. But our "attention" now was something more than mere formality, as the curt tones of the adjutant proclaimed the order consigning us to the command of Stonewall Jackson.

The battle of the Seven Days was over. The last curl of the smoke which had rolled down the slopes of Malvern Hill had been borne away and dissipated, and the inevitable rain following the conflict had washed the air clean of all taint of its sulphurous burden. There were still to be seen, here and there in the woods, trees recently felled where no ax had been plied, and in the fields there were furrows not traced by the plow; there were acres—miles indeed—of country, now without a human inhabitant, where the soil was trodden like a highway; about the White House on the Pamunkey, fires were still smoldering among the *débris* of abandoned camps; here and there, in

deserted farm-houses, or else in some shady grove of timber near a spring, were field hospitals, in which some of the wounded yet lingered, awaiting transfer through convalescence, or the final discharge which death would confer; here and there, too, in out-of-the-way places in the woods, disfigured by dust and blood, and with faces blackened and swollen and distorted out of all likeness to the Creator's image,—prostrate in the underbrush, or standing upright and stark in mud and water as they had met their doom,—were forms in gray or blue or brown clothing which betokened that they had been men. In Richmond, the tobacco factories and warehouses were so many hospitals and prisons, and full to overflowing with the city's late defenders or assailants, as the case might be; down the James, about Turkey Island Bend and the Westover plantation, the remnant of one army was striving, under the protecting guns of its iron-clad fleet, to renew its shattered organization and impaired morale; while between it and the city, another army, in scarcely better plight, was laying to heart

Napoleon's aphorism—"After defeat, the saddest thing in war is victory."

The opening of the attack which had rolled up McClellan's right flank had been intrusted to the raw troops of the newly organized "Light Division" of A. P. Hill. These brigades, and even many of the regiments composing them, had been but a short time associated together, were strangers to each other, and to the young major-general, their commander, and thus the interdependence and homogeneity of feeling—such important elements of efficiency in modern warfare—were feeble or altogether wanting in the division. But these soldiers, in whose garments the smell of fire was not yet to be found, were quick to learn the ways of war; the same men, who under the cannonade of the 26th of June—that ordeal always so trying to new troops—had suffered almost a panic, four days later stormed and captured those death-dealing guns with the steadiness and determination of veterans. Before the battle, they had scarcely known and cared even less to what division of the army they belonged; *now* if you asked one of them he would answer, with a perceptible pride in his mien and in his voice, that he was one of Hill's "Light Bobs."

For a while the mere relief from daily hardship and danger had been enjoyment in itself, but by degrees the dull routine of the camp grew more irksome than ever by contrast with the late stirring events; and in recounting the triumphs and glories of the battle, men lost sight of its attendant horrors, or saw them more and more dimly through the veil of retrospection. Dead comrades were buried out of sight, and so gradually they passed out of mind; the more seriously wounded were at home on leave, more to be envied than pitied, while the slightly wounded were returning to duty, physically or morally none the worse for their scratches.

And now we were going with Jackson! The very idea seemed to infuse a new spirit into the listless men, as if they felt already the refreshing breezes and tasted the cool springs of the far-off mountains. A month before, in our sultry squalid camps along the Chickahominy, the news had reached us of the brilliant Valley campaign, and in the midst of destitution and depression and doubt, with the enemy at the very gates of the capital, the bulletins of McDowell, Front Royal, Winchester, Cross-Keys, Port Republic, read like a fairy tale: the contrast with our own tedious inaction lent a

charm to the record of these stirring events, while scurried mouths watered, and stomachs nauseated with eternal ration-bacon fairly yearned for the tents of Israel filled with blockade dainties, and for the teeming wagons of "Commissary"-General Banks. With feverish interest we devoured the accounts of rapid marches, of sudden appearances where least expected, which had frustrated every combination of the enemy and conferred upon the troops of the mountain department the anomalous *sobriquet* of "Foot Cavalry." The commander who was thus harvesting laurels almost daily—the first crop that season had borne, after long and sorrowful sowing, upon Confederate soil—had been, only a year ago, an obscure, plodding professor of natural philosophy at the Virginia Military Institute; remarkable chiefly for certain eccentricities of manner, and something of a butt for the witticisms of the thoughtless young cadets, because of what they regarded as too rigid exactness in his enforcement of the regulations. A little later, with the victory of the Southern arms at Manassas, came the story of how Jackson's brigade of Virginians had stood "like a stone-wall" against the irruption of the enemy upon our wavering lines, and won for their leader the name which was destined to supersede his sponsorial designation in the ages to come. In the long period of disaster which ensued, he escaped the popular notice. Left with a single division to guard the approaches to the fertile region of the Shenandoah, he had held on until the last moment, and when compelled, by the general drawing in of the Confederate frontier, to fall back for his own protection, had retired sullenly and doggedly, bringing off all imovable stores and munitions of war, tearing up the railroad to save the precious iron as well as to retard the enemy's advance, and even transporting the locomotives up the Valley Turnpike by horse-power, while his rear-guard was skirmishing at every step with the pursuing column, and another force was moving upon his flank through West Virginia to cut off his retreat. Then followed that brilliant series of successes already referred to, which sent a thrill of hope through all the Southern land. Again the enemy had found the inexorable stone-wall in the path of his triumphant advance,—a stone-wall for resistance, a catapult for dealing rude blows where an opportunity offered. Milroy, Banks, Fremont, Shields, in succession, attested his power of striking hard and

promptly. The tactics of the young Bonaparte in Italy were recalled to mind, and the comparisons of the two campaigns reflected no discredit upon the Virginian. As we wondered still at these triumphs, he was again on the move with his face turned eastward, and the roar of his musketry was heard upon our left, swelling the din of that hot afternoon at Gaines' Mill, as he drove in the Federal flank and forced McClellan from the ground of that stubborn contest. But the free air of the mountain land liked him best, and he was not to linger long in the lowlands; the enemy's shattered forces in Northern Virginia had been reorganized under General Pope, who "came from the West where he had been accustomed to see only the backs of his enemies,"—as he announced in the order by which he assumed command. According to this instrument, the war in that department was to exhibit henceforth a new aspect entirely; the army was admonished to dismiss from its vocabulary such terms as lines of retreat and of supply, and to give to its enemies a free monopoly of the same; positions were only to be considered with reference to attacking from them, while General Pope proclaimed that his head-quarters would be "in the saddle." At the period with which this chronicle opens, Jackson had already been dispatched to offer remonstrance to these Vatican decrees, and we were to follow on the morrow.

It was late in the afternoon before we embarked in the train of cattle-cars and wood-flats and began our rumbling, bumping journey—through the Chickahominy low grounds and past our old picket-post at Meadow Bridges, along the causeway where we had marched at double-quick going into the "first day's fight"; then on through the hours of the night, jostled and cramped, all idea of time or of distance being merged in the sense of present discomfort and the necessity of bearing it, until, chilled to the marrow and but half awake, we stopped, and our objectivity rallied just enough to take in vaguely that we were at Gordonsville. Some woods close to the track were designated as our camping ground; they were already populous with sleeping men of the other brigades, more than one of whom was rudely awakened by being trodden upon, as we stumbled among them in the dark—for there were no fires burning. Blankets were soon unrolled and spread, and in a few minutes more we had joined our comrades in the land of Nod.

The drum corps and bands of the division, sounding reveillé in deafening discord, recalled us to consciousness and our eyes opened upon a scene so different from the monotonous level fields and pine woods of the low country to which they had been accustomed, that we had to rub them again to be sure we were not dreaming. Bold hills shut off the view on every side, and waving fields of ripening corn stretched toward them and up their slopes, while thrifty-looking farm-houses, embowered in trees, relieved the landscape here and there. The dew-drops sparkled in the level rays of the sun, or frosted the tops of the grass when the long, cool shadows fell, and over all was the brilliant, yet pure and tender, sky of a midsummer early morning. Only in the camp and about the dépôt was there to be seen a vestige of anything betokening war. Here freight trains were moving up and backing down as they discharged a burden little enough like the wares of peaceful traffic. Ominous-looking square boxes, singularly heavy to handle, needed no marks to denote them ordnance stores to an experienced eye, and certain mess-chests and rolled tents, with other personal effects of the general staff, piled upon the platform, certified the military character of the freight. Little other baggage was to be seen, for the wagon-trains were to follow the troops by country roads, and would not be up for some days yet; the regimental camps were defined only by the stacked muskets upon the color line, the men being grouped about in the intervals, discussing the situation while they awaited further developments. We had yet to learn that in Jackson's corps to stack arms was synonymous with being in camp, and that permission to halt implied making oneself comfortable without delay.

As it happened, however, Providence, or some other power, befriended our inexperience, and before the morning was far advanced, we were distributed by brigades, in more commodious camping-places, along a woody ridge with slopes open in front to the banks of a small brook. Beyond this the ground rose again, and upon this acclivity, the troops of Ewell's division were already in camp. Here began our real initiation into the mode of life which we were henceforth to pursue. By this time the stock of cooked rations was running low in the haversacks, and details were ordered to report for a fresh supply to the brigade commissary; what it was to consist of, and where

it was to come from, were questions speedily settled by ocular evidence. In the open ground near the stream, was a rail pen inclosing a herd of cattle; thither the details were conducted, and found the subsistence officers of the division already assembled, and having their provision allotted to them on the hoof. It was short work after that; the animal selected was driven apart from its fellows, and dispatched by a musket-ball in the forehead; it was skinned, dressed and quartered on the ground, and slung upon a fence-rail between two men, each quarter of the smoking beef was borne to camp. Here, orders had been received to prepare for an immediate movement, and a style of cooking ensued which was of a piece with the rough-and-ready butchery already described. The new provision was no sooner distributed to the messes than men were busy about the fires preparing it for transportation on the march; bayonets, ramrods and sharpened sticks served in lieu of utensils, and, impaled upon these, the collops, still warm and quivering, were speedily twisting and sputtering over the fires. The staff of life was represented by a mixture of flour and water made into dough upon the rubber side of a poncho, and baked in the hot ashes, or else upon clean chips propped up on edge before the fire. Both bread and meat were quite innocent of any savor of salt, for there had been no issue of this useful condiment, but a little powder from a broken cartridge, rubbed upon the steaks, furnished a tolerable substitute so far as they were concerned, while a small dole of "genuine" coffee and sugar—the first for many weeks—seemed an earnest of the good things toward which our expectation yearned. There were, indeed, certain dainty souls in our midst, who, having secured to themselves the tidbits,—by covenant with the butchers, whose perquisites they were,—now served up savory messes of brains or tongue in extemporized frying-pans, contrived by adjusting a tin-plate upon the end of a cleft stick, or prepared ox-tail stews with flour dumplings in some of the patent "contraptions" which they had providently brought along,—thus making "both ends meat," as some one suggested. The charm of novelty yet clung about the new order of things, and laugh and jest were not wanting to season the primitive fare. The *pièce de résistance*—as it was, according to most literal translation—was variously named, as the inventive fancy of the individual, or his luck in the cut falling to his share, might suggest. "Beef and

pull-it" enjoyed a run of popularity, until some fellow—whose wits were possibly sharpened by appetite unappeased in spite of his struggles with an especially stringy morsel—offered in amendment, "sinews of war." This designation was adopted at once, as better befitting the dignity of the military matter under discussion, and passed into the vernacular of the corps, to hold thenceforth a significance no less specific than attaches to the knightly order bestowed by the Merry Monarch upon his favorite loin.

Supper disposed of, pipes were filled and lighted, and we broke up into small councils of war; each discussing a different theory of the campaign without, however, coming to any definite conclusion. Where was the enemy? Which way was he moving? Would we await his attack or advance to meet him? Above all, where was Jackson? We had not yet seen the leader of whom we had heard so much, and we had the most indefinite notions concerning his personality. The awkward martinet professor, described by some of our number who had been students in his classes at Lexington, did not fill the measure of the central figure of the Valley campaign; our minds would not be content with dry statistics; their familiar "Old Jack" was not like our "Stonewall." The masses of his countrymen found something peculiarly acceptable in the character of the man, apart from his services: his retiring modesty, his indifference to display, his simple trust in the Giver of all victory, were shining virtues in the eyes of a people who had only taken up arms in behalf of what they considered their dearest rights, and with no care for the pomp and circumstance of war. His very homeliness was a recommendation to the essentially practical-minded Southerner, regarding himself as the peer of any man, and constitutionally intolerant of the pretension symbolized in gold-lace and other fripperies of official rank. To such a one the old faded gray coat and cap of the Valley campaign were emblematic of something after his own heart. In a contest which, in the estimation of the participants on either side, partook of the nature of a crusade, the man whose first care, after the "fatiguing day" upon which he himself had shed most glory, was to forward his subscription to a Sunday-school at home; the man whose negro servant claimed to foretell a battle by the omen that his master rose frequently during the night to pray—this man would clearly "do to tie to." A hundred stories

illustrative of these traits had already gathered about his name and invested him who bore it with a mysterious interest, and while they served to draw him home to our hearts, as a representative man, they marked him apart as a leader of men, not by any fortuitous combination of chances, but because of that inherent fitness which the chances of war had brought to light. This prestige attached also in some degree to the troops whom he had unfailingly led to victory, and whom we as yet scarcely conceived as mortal men in all ways like unto ourselves. Those fires gleaming through the darkness across the little valley were to us as are the lights of a populous city to the stranger approaching it at night, revealing nothing of the mortal nature of the busy inhabitants; nor was our ideal disturbed when returning daylight showed no trace of our late neighbors upon the hill-side. Only here and there a thin wreath of smoke from a smoldering fire betokened where they had been; under cover of the darkness, while we were still sleeping, without drum or bugle note, they had folded their blankets—tents they had none—and had “silently stolen away.”

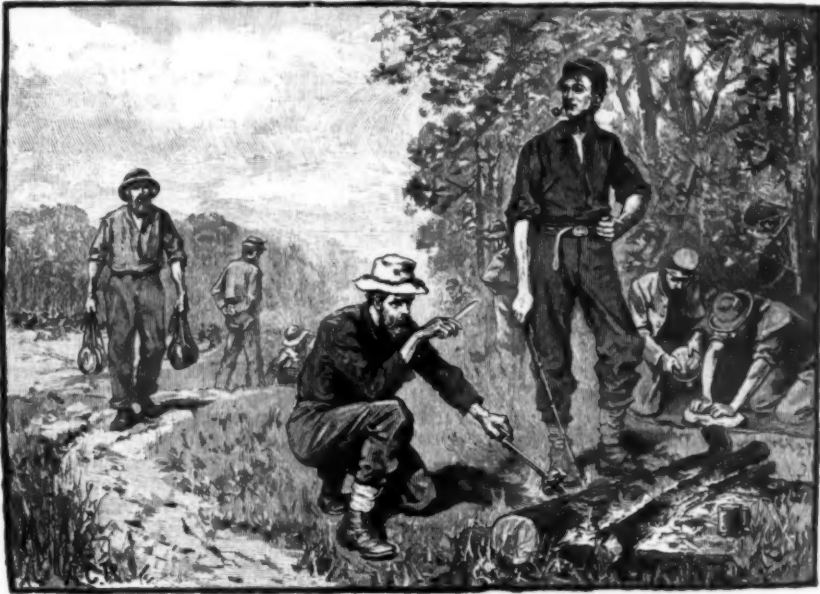
Some important movement was evidently afoot, and still the morning hours went by and brought no orders for us. The shadows were already lengthening out again, when drums were heard beating in some of the camps further along the ridge, as if for dress-parade; a few minutes later our adjutant passed along, warning the regimental officers to prepare their companies for immediate marching; and as the sun was dipping behind the western hills, columns were seen winding down from the timber to the plain below, then moving northward toward the Rapidan. Soon we were following in the same direction, through the fields at first, where the troops ahead, marching in column of fours and by the right flank, had worn parallel foot-paths knee-deep in the herbage; then out upon the highway, trodden smooth and hard by the same feet; now with the forest shadows deepening the twilight into gloom, and the religious quiet of its dim aisles broken by the shuffling murmur of the column's tread and the cadenced clanking of canteens against the bayonet-shanks, or the occasional note of the “whip-poor-will” uttering shrill protest against the strange intrusion; now by farm roads, with rows of tall corn standing upright and motionless on either side, the drooping blades gleaming mysteriously in the gray moonlight, as it were another armed host halted for ours to pass; now

down in a glen, with dank odors filling the air and the musical gurgle of running water under our feet, as we crossed a rude pole bridge; and anon carried far away in thought from any of these surroundings, as the bark of a dog from some otherwise silent farm-house suggests other homes, then wrapped in slumber. Knapsacks were growing heavy, and muskets were shifted at shorter intervals from shoulder to shoulder; feet were beginning to throb and burn with a suggestion of blisters, and to drag a little as we stepped out; men spoke seldom and only in monologue, the sterner souls deigning no reply to the exclamations of pain or fatigue which formed the burden of speech; and so on through the hours of the still summer night. A vociferous baying of dogs and crowing of cocks at last announced that we had arrived *somewhere*; a few moments more, and the clustered white houses and court-house cupola of Orange stood out clear and distinct in the moonlight before us. Rest here, for a while at least, for the Rapidan is close by, and the enemy not many miles off on the other side!

It was a busy scene in and about the usually quiet little country town upon which the sun rose that morning of the 9th of August. Our night march had been pursuant to an order for concentration at this point, and we were beginning a day pregnant with events. Since an early hour the bivouacs had been all astir with preparation; batteries stood, with horses ready harnessed and munching their forage, in the fields where they had parked over night; ordnance officers were riding about, directing the movements of certain tarpaulin-covered wagons,—all the visible transportation, except the ambulances,—in the throng which poured steadily through the town and out upon the road to Barnett's Ford. We had at last a near view of those troops whose exploits had so commanded our admiration, as we waited by the roadside to take our place in order in the column, and an interesting study we found in the endless variety of type and costume offered. Almost the only semblance of uniformity was in the arms and equipment, every portion of which had changed its allegiance since it issued from the arsenal, while the garb of these veterans exhibited a strange mixture of garments furnished forth by the quartermasters of either army. There were many brigades of Virginians, representing every class and section; conspicuous among these was the old “Stonewall Brigade,” now led by the gallant Winder, who had already seen the sunrise of his last morning on earth;

Carolínians, too,—gaunt, sallow men, wearing the gray cloth of peculiar texture which, in spite of stain and rust, distinguished the "State Troops;" solemn as Cromwell's "Ironsides," and about as tough to tackle.

of homespun; the few coats or jackets to be seen are well cut, and the threadbare cloth is of fine quality, while the pelican device on their buttons tells the story of their origin; for they come from far-off,



THE SINEWS OF WAR.

Tall, big-boned Georgians, slouching by in long-skirted coats of brown jeans, their swarthy faces and abundant bushy locks shaded by wide-brimmed wool hats of the same color, or of black or gray, giving them a very Quaker-like look, despite their arms and trappings. And here comes a set of fellows of a different sort; there must be a dash of Celtic blood beneath that gay *insouciance*. A novice would be puzzled to say what state claims them, or what nation, for that matter,—you may hear half a dozen tongues spoken in one of those regiments, counting out Doric brogue and local "gumbo." Ask one of them the name of the command, and the odds are he will tell you—with a half-pitying glance, as if the information were, or should be, superfluous—"the Eighth Brigade." There is a crispness in the utterance which distinguishes the dweller in towns from the agriculturist, while a certain *chic* in their habiliment, as well as the "snap" and go in all their movements, sets them further apart from the other troops. Their dress is motley enough; but there is no admixture

sunny Louisiana—from the cosmopolitan "Crescent City."

For a while the march is slow and often interrupted, for the head of the column has already reached the Rapidan and is crossing, and with probable foot-work to do on the other side it is good economy to keep dry shoes and trowsers also, if the ford be deep. So we think when it comes to our turn, and splash through in accurate uniform as to our nether members, looking very top-heavy with the divested garments added to bulging accouterments and baggage, and upborne by so slender a support. And so we pass the Rubicon. No more halting or delay now. "Close up!" comes continually along the column, and though the hot sun glares and the air is filled with choking dust, the march is pushed without relenting. A moment's halt by any one for a swallow of water must be atoned for by a long double-quick, seasoned with much jostling and not a few observations of a *curioso* character from the men filling the road, before the laggard can hope to regain his place,—by which time

the benefits of his sybarite indulgence are more than canceled. Many such stragglers from the brigades ahead are already mingled with our ranks: some of them are but too willing to escape from their own and have no thought of regaining them; others, though conscious of a lapse from virtue, are content for the present to backslide no further, and with their faces in the right direction trudge sturdily on, hoping vaguely to catch up at the first halt. There are signs of work ahead, too; we meet occasional cavalry-men conducting dusty blue-coats by twos or threes to the rear, and reporting "plenty more of the same sort a little further down the road"—they are well out of the scrape for to-day, lucky scamps, and so can afford to be facetious. Now staff-officers and couriers thread their way circumspectly by the side of the road, or, with more enterprise, strike through the fields and woods at a trot, and anon we try to persuade ourselves that a faint, jarring growl, felt rather than heard at intervals, may be merely distant thunder; but there is a trifle too much of the *staccato* in those bass notes, and now, as we open a more extended view, there is smoke rising from

over toward Culpepper. "The troops ahead may be in camp there," or, "Somebody may be burning new ground," or, "No—look yonder!" Just over the distant woods, a queer little round white cloud jumps suddenly out of the sky,—there's another! And now a pattering sound, like rain falling on a tin roof, comes back to us, mingled now and then with another not to be mistaken,—the prolonged, murmurous vociferation rising and falling upon the air, now shrill, now hoarse,—which tells that the gray people are charging. The ball is open, indeed!

Forward still—but there are eddies and counter-currents now in the tide of humanity rolling toward the sound which becomes more and more unmistakably the voice of battle. First of all come the stragglers,—men who, wearing the garb of soldiers, yet never fight,—limping rearward with abstracted gaze, as if they took no heed of the jeers which greet them at every step; ambulances next, inside of which we catch occasionally a glimpse of a prostrate, moaning figure returning broken and mangled over the ground which he trod an hour ago,—where some of us are now treading in his very foot-prints; then more stragglers; then field-hospitals and ordnance-wagons beside the road; then stragglers again, some of them bloody now, and grim with the stains of mingled dust, and sweat, and powder, and haggard with faintness and fatigue. Now the leveled fences and wheel-tracks turning into the fields mark the frontier of the battle-ground, but the firing, though distinct, is still receding, and we keep to our order in column. The sun is already down, and the rising moon sheds a soft, mellow light over the scene of conflict, revealing its features only by suggestion. Stacked muskets and drooping battle-flags mingle confusedly with rows of trampled corn, and the eye seems to discern the camp-fires of an army in the stray beams which filter through the foliage, making spots of alternate light and gloom in the woods. A light, filmy vapor hangs breast high above the ground, and the air is odorous with its pungent fumes and with aromatic exhalations of the bruised herbage. By degrees the firing dies away in stray skirmish shots, until at last the quiet of the summer night is broken only by the rumbling of ambulances on the road and the subdued voices in the bivouacs, and we lie down in the wan moonlight upon the field which has been won without our aid. The Valley army has again en-

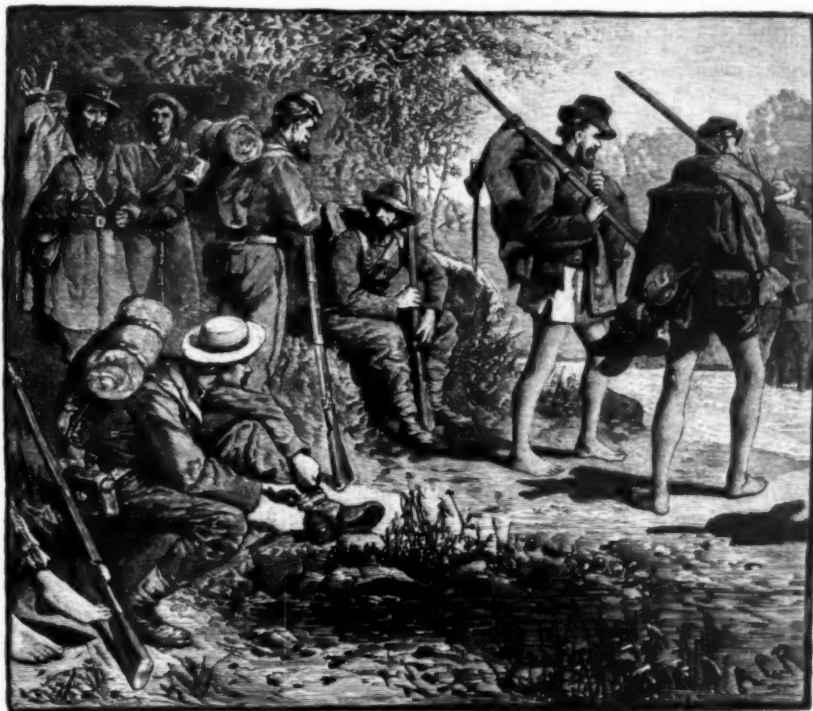


A "TAR-HEEL."

countered its old adversary, and again Jackson has given "check."

Our service thus far under the new *régime* had been a little disappointing; for, though the field of Cedar Run had brought no hard knocks to our personal share, and while we came in for our due proportion of praise, it was somewhat barren of substantial pudding. It had been unjust, perhaps, to General Pope, upon so brief a probation, to have compared unfavorably his administration of the subsistence department with that of Gen-

have first proved all things; and before many days we were once more in quest of the general with the ambulant head-quarters, who, notwithstanding his dispatch from the battle-field that his cavalry and artillery were in pursuit, had followed at so respectful a distance upon our flying traces that, in the two days which elapsed between the close of the engagement and our return across the Rapidan, he could scarcely have enjoyed more than a distant glimpse of even "the backs of his enemies." Nevertheless, though



PASSING THE RUBICON.

eral Banks; yet we could not quite forbear some regrets for the "flesh-pots of Egypt," as typified in our ovens and camp-kettles left behind, when the fruits of the promised land were found to consist of green corn, and not too much of that. We accordingly went back to hunt up our wagons, solacing ourselves with the moral reflection that grass beef in Orange was better than a dinner of herbs in Culpepper with strife in the midst thereof. But we were not to hold fast to even so much that was good, until we should

still in his novitiate as to the modes of warfare prevalent in Virginia, and laboring under further disadvantage through defects in his Western education, General Pope learned apace. In the hitherto neglected department of military science relating to lines of retreat, and in its application, especially, his progress was most rapid. Following the axiom which declares that *linea recta brevissima est*, the lines in question were promptly reduced to a single one, upon which he moved with such celerity that not

even Jackson's practiced marchers could overtake his rear-guard before it was over the Rappahannock.



A "PELICAN."

But the race is no more invariably to the swift than is the battle to the strong, and a trial of speed was yet to be essayed which should refute calculations by the book of arithmetic; in which the Foot Cavalry, though heavily handicapped, was still to show a lead at the winning-post. As the spirit of gaming will pervade such contests, the interval between the heats witnessed what seems, in the light of subsequent events, very like a big game of bluff. It was upon a bright Sunday morning—the more shame—that a little bridge spanning the river near the Warrenton Springs formed the center of interest for either army. The enemy made numerous attempts to destroy this structure, and thus prevent our crossing, while some companies of sharp-shooters, on our side, were thrown

out to defend it; and, as the day wore on, a furious artillery duel grew out of this slight difference between neighbors. The gallant officer who commanded the skirmishers has testified that it was the most trying duty of a somewhat extensive service; yet so well was it performed that at night-fall the bridge still stood, and we lay down expecting a renewal of the contest on the morrow.

"Mystery is the secret of success,"—so our leader professed and believed,—and we were never to know what happened next day in that locality; for by two o'clock in the morning we were moving silently among the hills, following the course of the river upward, and long before dawn were well out of sight and hearing of our last night's camp. The two days' march which ensued was a test of the best speed and bottom of the Foot Cavalry; that movement must remain a life-time memory to those who were participants in it, and yet it is almost impossible to recall its incidents with any degree of distinctness. No systematic halts broke its weary monotony, nor is there any remembrance of camping-places to serve as an index of each day's stage; when the column stopped, far on in the night, the weary, foot-sore men, all accoutered as they were, dropped beside their stacked muskets, and without so much as spreading a blanket were instantly asleep. No reveillé woke them in the morning, but long before the crack of day they were shaken up, to limp on in the darkness, still more than half asleep. Knapsacks had been left behind in the wagons, and haversacks were reduced to the minimum weight by noon of the first day; for the provision of unsalted beef was spoiled and worthless by that time and had to be thrown away. There were no stated meal-times, therefore; the fuel for this rapid and prolonged locomotion was chiefly green corn from the fields by the roadside, hastily roasted when some blocking of the way by the artillery or ordnance train, stalled at a hill, necessitated a few minutes' halt; or unripe apples, snatched from the trees as the column passed an orchard, and devoured while marching. The fine dust, which enveloped the column like a cloud, settled upon clothing and accouterment, upon hair and beard, until there was no longer any distinction of color; only hands and faces showed a departure from the whitey-gray uniformity, as the mingled soil and perspiration streaked and crusted the skin. Men dropped exhausted out of ranks by the wayside, or got hope-

lessly in arrears in stopping to gather a few ears of corn or an apple, or to dip a cupful of water from a spring; but the column still pressed on. Whither were we going in such haste? No one could guess, unless it was, perhaps, he who was now seen frequently riding back and forth along the toiling column, and who by degrees had come to be recognized as its guiding spirit—Jackson. It would have been easy to have mistaken him for the courier of one of his brigadiers, for all external tokens to the contrary; his single-breasted coat of rusty gray, sun-scorched about the shoulders until it was almost yellow, and his plain cadet-cap of the same hue, tilted forward until the visor rested almost upon his nose, were meaner in appearance than the make-up of many a smart fellow in the ranks whose musket was the badge of his station; and not a quartermaster in the corps but would have considered Jackson's gaunt old sorrel a bad



FIRST AT THE WINNING-POST.



A BACKSLIDER.

swap for his own nag. But the eager look in his eyes when one could catch a glimpse of them under the cap-brim, the firm set of his lips and the impatient jerking of his arm from time to time, were all signs by which we were to learn to know that "something was up," though we could not read them then. We had already crossed the Rappahannock and were stretching across Fauquier at our best pace. The people of this long-abandoned border-land stared amazed at the sight of the gray-backs in their midst again,—still no sign of a blue-coat. We cross the Manassas Gap Railroad and strike into the defiles of the Bull Run Mountain,—can we be going to the valley? The sun has risen for the third time since this mad race began, as we strike a railroad track *running north and south*, and Manassas is in sight! Ah! General Pope, better had you looked a little more carefully to your "lines of communication and supply." The longest

way round is sometimes the nearest way home, and "disaster and shame now lurk in the rear" indeed—for Stonewall Jackson has flanked you!

It was the work of but a few minutes to clean out the small *dépôt* guard and the infantry force hastily sent down from Alexandria by rail, to repulse our "cavalry raid," and the stakes were ours. The space about the station was occupied by frame store-houses and sutlers' shanties, the camp of a cavalry regiment was standing as its late tenants had left it, and there were besides, two trains of cars freighted with new clothing for Pope's army, but which that army was destined never to see unless it was upon the "backs of its enemies." True to its equine instincts, the corn-fed Foot Cavalry charged first of all the salt-sacks; slitting them open and devouring the contents by the handful with the gusto of colts fresh from clover pasture. But this most urgent craving was soon appeased, and when the salt had lost its savor, we began to consider what we should eat and drink, and wherewithal we should be clothed,—no easy matter, and one requiring the exercise of judgment and self-denial, by reason of the very abundance of the supply; for it was possible to utilize of this profusion only so much as we could personally transport, and we had had recent experience of how very little that might be upon occasion. Yet how tempting were those new blankets, rubber-ponchos and shelter-tents! How comfortable next winter would be those cavalry overcoats with voluminous capes, and collars turning up to the tops of the ears! and those high boots,—they would be just the thing for stumping about in the snow and slush, but, alas! how worthless for such marching as we had done yesterday and might do again to-morrow. If we could only have brought the wagons along, or if this railroad were but open all the way to Richmond! How soon a haversack got full, and how hard it was to reject further additions of sardines, canned meats and fruits, and desiccated vegetables! But such regrets were worse than vain, and he who dwelt long upon them was likely to lose his chance of obtaining even such things as he might lawfully and prudently claim. Some solution of the difficulty was afforded as the day wore on, and our wealth began to be somewhat more equitably and economically distributed, as in more peaceful communities, through the medium of traffic and barter between man and man of articles which one did not want for those of which another held a superfluity.

A mounted officer or courier would be seen exchanging any number of shirts or trowsers for a McClellan saddle, a pair of spurs, or even a halter; or a ragged private would be offering for sale to an officer, equally ragged it might be, a handsomely mounted pistol or sword,—each endeavoring to fix the price according to a nice calculation of the imminence of marching orders. An infantry man with a captured mule would be hesitating whether to retain his "loot" at the risk of confiscation by the Q. M. D., for the sake of getting a lift on the next march, or to make a swap for something of surer utility, as a pair of shoes. The tariff was somewhat irregular, but the law of supply and demand governed it still; a pint bottle, bearing the cabalistic inscription, *Sp. Vini Gallici*, was a sufficient *quid pro quo* for a case of fine surgical instruments, while an entire keg of lager went begging for a long time. A loyal subject of Gambrinus was at last found in the person of a sturdy Hessian who had strayed into our ranks: "I was looken efervere already, unt don't can vint some beer—dat is better don anything," said the happy Teuton, as he dipped his tawny mustache into the amber fluid and took a mighty swig.

So ran the festive hours of our brief holiday, and now, having danced, it remained to settle accounts with the piper. Night was coming on; and so were our friends whom we had left on the Rappahannock, and orders were already abroad to hold ourselves in readiness to take the road again. But, lest by the token of walking in ways that were dark we should lie under the imputation of evil deeds committed, a grand illumination signaled our departure and insured General Pope against mistaking his way. We ourselves had some need of a similar office, for the corduroy road to Centreville was full of pitfalls and stumbling-blocks, and the last gleams of our gigantic holocaust were giving place to the first streaks of dawn as we reached that desolate little hamlet and were allowed a short halt. Still no enemy, and as we filed off upon the road to Sudley our minds were more mystified than ever as to the objective point of our restless leader. The old soldiers who had served under Johnston and Beauregard were now at home, recalling at every step scenes associated with the battles of "the 18th" or of "the 21st;" but to us of the Light Division the locality was devoid of any such significance. Indeed, after the fertile valleys of Fauquier, so lately traversed, the

famous battle-field seemed remarkable only for its arid desolation. The houses about which the tide of conflict had surged on that sultry Sunday morning a year ago were distinguished from other Virginia farm-houses mainly in that their tenants would seem possessed of the mysterious faculty of living without water, so rare were the springs in this region. We cross Bull Run near the ruin of the famous stone bridge, and now there seems to be some stoppage ahead;

so distinctive of the officer of the old service, and as we scramble into our places in the road, suddenly, from beyond the woods in front, the sharp, ringing report of a Parrott gun breaks upon the air,—another—and then another still, but duller and more distant. A few seconds, then succeeds the familiar flutter of a rifle-shell, passing nearly spent overhead. The hunt is up; Jackson is at bay on his baptismal soil, with Pope in front and the whole North behind him, and



"CORN-FEDS."

the troops file off along the edge of a wood as if they were at last going to take ground for camp. The stillness of the hot summer afternoon is broken only by an occasional impatient remark, as we rest in the broiling sun, seated upon the dusty grass by the roadside. Upon a bare knoll not far off, our brigade commander is looking attentively through his glasses at something which we cannot see; now he closes them and rides down to the road again. "Attention!" comes the stentorian order, long drawn out,

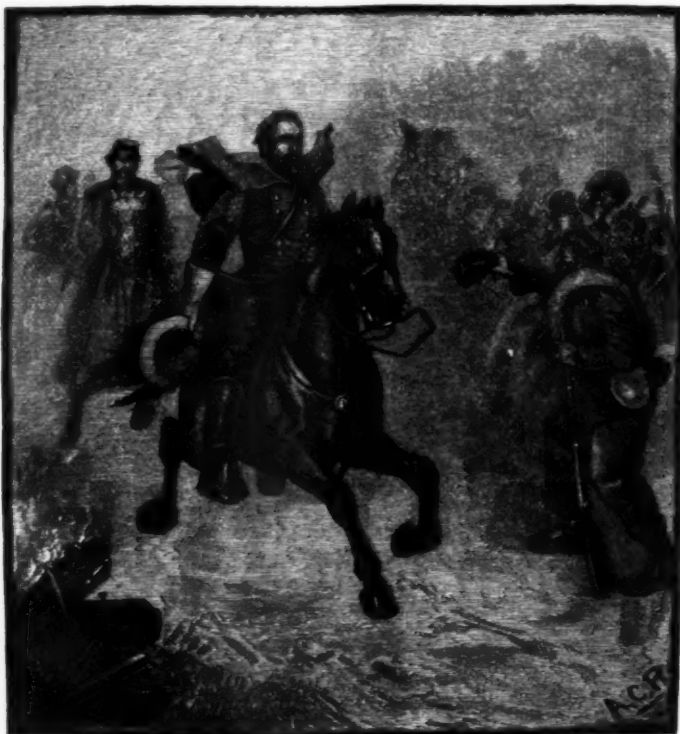
another battle has begun upon the field of Manassas.

Space forbids more than passing mention of the succeeding events of that memorable campaign. The world knows the story of Jackson's grim fight to hold his ground, while Pope, McClellan, and Burnside were closing in upon him, and his own lagging succor held off; of that sharp, short skirmish in the blinding rain at Chantilly where brave Phil Kearney fell in front of our brigade. It were vain to tell of the passage of

the Potomac, to recount the investment and capture of Harper's Ferry, where the scenes already described at Manassas Junction were re-enacted. Boonsboro', Sharpsburg, Shepherdstown,—these are names belonging to history, and to that custody the writer would yield them, while his modest pen more becomingly illustrates the annals of the Foot Cavalry in their every-day aspect.

The bright, bracing October days had come. Since the return from Maryland there had been no very active hostilities,

transit could not be disputed! However this may be, the man of the Foot Cavalry seemed to regard the occupation in the light of an *auto da fé*, and as he warmed his hands by a fire of piled cross-ties, with a length of rail, poised upon the top, red-hot and bending with its own weight, an inquisitor might have envied the beatific consciousness of duty well performed which overspread his soul. Like other people in prosperous circumstances, we came gradually to be quite fastidious in our considera-



A GLIMPSE OF STONEWALL JACKSON.

and the troops were resting in their camps, scattered over the fair country between Winchester and the Opequan. Occasional changes of locality for the sake of wood comprised the extent of the marching, and kept the reputation of the corps for mobility from going quite to seed, while its destructiveness found vent in tearing up all the railroads within reach,—as though it would have thus disposed finally of the one rival whose pretensions in the matter of rapid

tion of camping-places, and in view of the abundance of fine timber which surrounded us and the bold springs which gushed from every hill-side, were luxuriously extravagant in the matter of fuel,—if, indeed, generous fires might not be reckoned among the necessities of life, now that the nights were becoming frosty, while as yet we had but a scanty *tenue d'été* for all defense against the nipping air. Few companies could parade a sound pair of trowsers; an overcoat was a

distinctive badge of high official rank, and tents had long since passed among the things of tradition. In default of the regulation shelter, the camps presented an array of nondescript wigwags in every variety of color, shape, and material. The dwellers in these motley tabernacles—themselves no less motley—were like a mob of school-boys in their excess of animal spirits, which, deprived of outlet through the channels of hard fighting and marching, found vent in noisy hilarity upon the least provocation; for now that the wagons were up and “pone” bread and beef stews had re-appeared in the *menu*, the Foot Cavalry, feeling its keep, waxed fat and kicked. Two causes were potent above all others for the calling forth of this vociferous demonstration,—the chase of a hare or the appearance of Jackson near the camps. His dislike of notoriety was well known, and he never failed to avoid it when it was possible; for this very reason, the men who, when General Lee passed, were wont to stand silent by the roadside and with heads reverently uncovered, would yell like demons for the sake of “making old Jack run,” and all the camps would turn out in force at the signal.

It was the end of a bleak November day; the fires of railway ties, extending in a long line either way as far as the eye could follow, made still more neutral by contrast with their ruddy light the dun-gray fields of stubble, and the woods in which the gorgeous panoply of the earlier season was paling into russet and ashy tones. The work was over and we were waiting with some impatience for the order to take up the line of march back to camp; for the evening air struck chilly through our threadbare and tattered jackets, and we had eaten nothing since early morning. Moreover, a wild rumor

had spread abroad that an issue of fresh pork awaited our return, and though the long habit of expecting nothing good until it came secured us against any serious disappointment, there were not wanting tender memories of “short” biscuit to raise our anticipations higher than we cared to own. Thus preoccupied, we are fain to refer a distant cheering further down the line to tidings of the coming rations, and we gather by the roadside in order to get off the more promptly when our turn shall arrive. The sound grows more and more distinct every moment, and now, far down the road some moving object can just be discerned in a cloud of dust which travels rapidly our way. Nearer and nearer it comes; louder and more enthusiastic ring the shouts, and now we make out in the dust the figure of a single horseman, with a clump of others trailing off into obscurity behind him—Jackson is coming! A moment more, and he is here, going at almost top-speed; his hat is off; his hair blown back from his broad white forehead; his eyes dancing and his cheeks aglow with excitement, and the rush of keen air. And now the cheers grow deafening and ragged hats are swung more wildly still as the men of the Foot Cavalry recognize their leader. The cavalcade passes like a whirlwind and disappears in the dust up the road, cheered to the very last lagging courier of the escort,—for we are in good humor now with ourselves and all the world. And as we step briskly out upon our homeward march, the air feels fresh and invigorating, and the miles seem shorter than they were in the morning; even the beloved biscuit is of minor consequence, and the promised pork pales beside the thought which fills us—that we have seen Jackson!

And we got the pork besides!

HER REPROOF TO A ROSE.

Sad rose, foolish rose,
Fading on the floor,
Will he love you while he knows
There are many more
At the very door?

Sad rose, foolish rose,
One among the rest:
Each is lovely—each that blows;
It must be confessed
None is loveliest!

VOL. XVIII.—18.

Sad rose, foolish rose,
Had you known to wait,
And with dead leaves or with snows
Come alone and late—
Sweet had been your fate!

Sad rose, foolish rose,
If no other grew
In the wide world, I suppose,
My own lover, too,
Would love—only you!

A NARROW STREET.

v.

JACOB DOANE left them the next morning. Perhaps it was chance, for Achsah shrank behind the others, afraid to trust herself, and possibly it was this which made his final words of parting fall to her.

"Remember that I am to hear from you; and some day, before many months, I shall look in upon you again, God willing, if it is only for an hour."

There was no outward change in their life when he had gone. There were the tiresome children droning over their lessons in the school-house a mile away, the daily homely work of the household, the small economies, the narrow ways which sorely chafed Achsah's spirit. But there are joys which show little on the surface, and an undercurrent of gladness made the days move smoothly and swiftly for Achsah. She looked forward to Jacob's first letter with a hope that was almost pain. She found it lying in the post-office one afternoon, a week or more after he had left them. She would scarcely have owned how many days since his departure she had taken the post-office in on her way to and from school. When the first quiet corner was turned, she broke the seal, pausing an instant to re-read her own name upon the outside, transcribed in a heavy, irregular hand. It seemed a new name to Achsah. The letter was such a one as a brother might have written to a sister interested in his work and surroundings,—nothing more. But Achsah was satisfied,—more than satisfied. She was full of an abiding joy as she carefully refolded the precious sheet. He had spread his daily life out before her. He had let her look into his heart—showing her his hopes, his efforts for these poor people so suddenly dear to him. She forgot herself—or rather she had become a partner in his work. His entire trust was reward enough. And yet she lingered over the last few sentences: "I have just returned from a long tramp to the next village, which has no preaching-place. My only class-leader lives there. He came for me to visit a man frightfully injured in one of the mills, who must die. I hardly expect to find him alive in the morning, when I shall see him again. The low room, full of the reek of pipes, the air heavy with curses—the men, scarcely one of whom was sober, and the women—why do I put this

before your pure eyes? It haunts me. You are asleep by this time, though we have sat as late before your fire more than once. How the sight of your kind faces would strengthen me! But I must not think of that. May God have you in his keeping!" This was the beginning of a series of letters which made a glory around Achsah's colorless life. She replied to them one by one, stiffly, formally, as she fancied,—for she had not Jacob's ready pen,—but not unsatisfactorily to him. For he wrote again, "It is a lowering day. I have come in from a round of visits, tired and depressed. (Thank God! you know nothing of the misery and sin in the world!) I find your letter lying upon my table. It lightens the whole room."

Summer came, its arms full of flowers. But few found their way to the narrow street where the Brays lived. The season was unusually warm, and Margaret's health more feeble than ever. But there was no change for them—no stay by the sea-side or jaunt to the mountains, and but for Jacob's long, cheerful letters, which Achsah shared in part with the others, they would have known scarcely any pleasure. Nor were his letters always cheerful. Sometimes a word of discouragement escaped him. He confessed that so far he saw little or no result from his labors. Outside the small band he could call his own, suspicion, ignorance, and the prejudice that waits upon ignorance, stood in the way of his work. "But I am only occasionally disheartened," he wrote, "and my discouragement drops off the end of my pen when I sit down in my bare room to write to you. I find when my letter is folded my ill spirits have fled. I fear I inclose them to you. But do assure Miss Margaret that I am both well and happy in my work. I am only lonely, at times inexpressibly lonely. Still I know that I could never make a home here for any one dear to me. So, courage and patience! I say to myself. And do not let your kind hearts be made unhappy by my trials, which are one-half imaginary, and the other wholesome and bearable." Achsah read this letter with a swelling heart. Was it for her that he looked forward to making a home? She dared not dwell upon it, lest she deceive herself. It was too great a happiness to come to her

The summer wore away, and in the autumn Jacob made them a brief visit; walking half the way, as he boldly confessed, since his purse was too nearly empty to allow him to reach them in any other manner. It chanced that Achsah had a few days' vacation,—possibly he had planned his visit for this time,—and they spent long hours strolling about the pleasant suburbs of the town together in the rare November days. Summer came back a little while for them. October had left its gay flags upon the trees in the great, beautiful gardens outside the city. They turned over books together, they stood before pictures, and they dreamed dreams, and yet with no love confessed between them. If there was love in Jacob's heart, he held the confession back from his lips. Again they spent long, delightful evenings before the fire, with books and work, Susan purring contentedly over her knitting, and Margaret forgetting her pains to smile upon them from her corner. But often the book was laid down and the work forgotten. These hours were too precious and too few to be given to the thoughts of others. The life in books, though printed yesterday, was stale compared to that flowing strong and full in their own veins. They spent three happy, swift days together, and then he went back to his work. He said good-bye to Margaret and Susan in the little parlor; but Achsah followed him to the door. Margaret had touched Susan's arm, holding her back and closing the door softly behind the two.

"I wonder if you know how I dread to go," he said, lingering. "Not to the work; but I am so lonely there. You cannot realize what it is to come from the sick or the wretched or the indifferent—which is worse than all—with a heart full, to an empty room. O Achsah, are women afraid of poverty? Women like you?"

The beating of her heart took away her breath.

"I cannot say. I have never known anything else." In her effort to speak quietly her words came slowly.

"But this is not poverty," he said impatiently. "Your home is a palace to anything I could offer a woman."

He sighed and was silent. Ought she to speak? Could she speak? What if he were thinking of some other woman, who waited for him! Oh, if he loved her why did he not say so and give her an opportunity to utter the comfort and assurance that was nearly bursting her heart!

He put out his hand, trying to smile bravely.

"You will still write to me, Achsah? Your letters will not fail?"

And Achsah, calling up all her strength, was able to answer steadily:

"No, they shall not fail."

"God bless you! Good-bye, my——"

He wrung her hand, sprang down the steps and out of sight.

Achsah closed the door, and stood a moment leaning against it before returning to the others. If he loved her why did he not tell her so? The "if" filled her with torment. Margaret scanned her face hastily as she returned to the parlor. But though it was a trifle paler than usual, and her manner was subdued, neither of these circumstances revealed anything to the elder sister.

Autumn deepened into winter and spring came round again. This year the Conference was held in a distant city. Jacob wrote from there: "Decide for me. For the way does not open straight before my feet." A larger and more desirable church in another town had been offered to him. His efforts in Durham had carried his name beyond that village. "It rests with me to say whether I shall go or stay. A month ago I should not have hesitated. But there has been a quickening at Durham. It seems to me to be the beginning of a great awakening. But why should not another reap the harvest as well as I? And there is no lack of work in this other church to which I am called. It is no bed of roses. Oh, my friend, it means so much to me—this larger, well-paid appointment (for I will not deceive myself or you); it means everything earthly for which I care—a home at last! And yet, when I think of Durham, which no one will covet—of the poor ignorant people whom nobody will desire, nobody love at first sight—decide for me; I cannot decide for myself."

Achsah handed the open sheet to Margaret, pointing silently to this paragraph, then she turned and looked out of the window, though there was nothing to see. Susan's crocuses had not yet begun to show their pale faces above the late snow in the tiny back-yard.

Margaret wiped her eyes as she refolded the letter.

"I think, dear, you should write to him at once, to-night."

Achsah's hands held each other tight behind her back, but she did not turn her face.

"What shall I say, Margaret?"

Try as she might, she could not keep her voice from trembling.

"It rests in other hands than yours, dear. It is hardly for him, even, to say," Margaret answered, solemnly. She put her arm around Achsah and drew her toward her, longing, yet not daring, to ask for her confidence. Poor Achsah's heart swelled. Did Margaret feel that it was perhaps her, Achsah's, own future that was thus being weighed and balanced? Did Margaret suspect the pain in her heart, the hope that struggled with doubt? But not even to her could she confess it, though she longed to lay her head upon her sister's bosom and own it all in a burst of tears.

That night, when the others had retired, she lingered down-stairs to write a brief note to Jacob.

"It seems to me that you have already decided," she wrote. She shed a few tears as she folded and sealed her letter—tears which she hastily repressed, ashamed to own them, even to herself; and she mailed her letter the next morning on her way to school, counting the days before she could hear in reply. A week passed and she received no letter. It was in the weekly church paper that they learned the result at last. Margaret read it aloud: "Durham, Jacob Doane."

"I thought it would be so," she said, in an excited, trembling voice which showed how near this matter had lain to Margaret's heart. "You are not surprised, dear?" she said to Achsah, as she laid down her paper.

"No;" Achsah said quietly without raising her head from her work.

"I was sure that he would not leave his poor people at such a time," Margaret went on, forgetting Achsah in her own interest in Jacob's decision.

Achsah neither avoided notice nor betrayed feeling. She listened to Margaret's encomiums upon Jacob (Margaret had worked herself into a nervous state of excitement not unusual in these days of weakness), adding a word when necessary, and going off to her evening studies at last, as though she had made no sacrifice and suffered no pang of giving up. Margaret watched her bending over her books and wondered if she had been mistaken, and if Achsah's interest in Jacob had been only that of friendly regard.

Another week brought a letter from him. He had returned to Durham. Religious interest had burst out like fire confined. The little chapel would not hold the people that flocked to it. One of the mill-owners

had offered a larger room. Night after night it was crowded. "I have not had a moment to write. I have scarcely eaten or slept for a week," wrote Jacob, from an over-running heart. And Achsah fell upon her knees in her own little room and sobbed out her last regret. What was she, that she should think of herself at such a time! And though he might stand as far away from and above her as the mountain-tops stand above the sea, she thanked God that she had known him.

His letters came less frequently now, though they were no less glowing with friendship—if friendship it was—and above all with Christian zeal. Through all this dreary spring, his burning words, in which self was forgotten, so filled her with his spirit that it seemed to Achsah that she walked with him upon a plain above all earthly ills.

Summer came on hot and exhausting. Religious interest no longer seethed and boiled at Jacob's station. The froth floated off; but of what remained, there was gathered the following winter enough for the foundation of a strong church. Now he might go. Another spring there would be nothing to detain him.

VI.

It was one day late in the winter that Achsah came home to find Margaret stretched upon the lounge, her face white and pinched with pain, while Susan bent over her in evident alarm. It was but one of several attacks of severe pain which had seized Margaret during the past few months, the knowledge of which both sisters had carefully kept from the youngest girl. It could no longer be concealed.

"Why did you do so, Susan?" Achsah's peremptory tone came back with the reproach. "And you should have called a doctor. How could you let it go on so? She must see a doctor at once."

It struck Achsah as strange, when a physician was summoned, that Susan did not call the young doctor who lived a few doors away, and for whom they had sent occasionally in their rare illnesses, but an old physician from the other end of town, who had known them as children, and who had years before attended their mother in her last illness. But still she felt no alarm. Assurance is deep-seated in the young; and nothing could really ail Margaret, she thought.

"What did he say?" she asked of Susan, catching her alone when Dr. Woodville had gone.

"Not much; he is coming again. He was here only a few moments."

"But he must have said something."

Susan tried to rid herself of Achsah's detaining hand.

"He asked a great many questions. Don't hold me so, child;" she broke out sharply, and from sheer surprise Achsah's hand dropped away. In all her life she could not remember hearing Susan speak in such a tone.

"I hope you will be satisfied now, dear," Margaret said that same evening. She was lying in her corner, paler than of old, except for a feverish spot on either cheek. "The doctor made me a little nervous with all his questions. It reminded me, Susan, of when he used to come to see mother."

Susan turned her head away without replying, and presently when no one noticed her, quietly slipped out of the room.

"I don't know why I should think of mother," Margaret went on feverishly. "You don't remember her, dear. She died a dreadful death."

"Margaret!" Achsah was white with terror. For an instant all horrible possibilities were real.

"No, dear, it isn't at all probable that I shall be like her," and the sick woman nestled among her pillows and tried to sleep. But an awful dread was roused to eternal sleeplessness in Achsah's mind.

Dr. Woodville fell into the way of looking in upon Margaret every day after this, merely as a friend, he said; prescribing nothing but a tonic, and suggesting a more nourishing diet. Once he brought with him a younger physician of established reputation, who chanced to have taken a seat in his carriage, he explained. Achsah followed them to the door when they went away.

"Tell me the truth," she said, looking piteously from one to the other.

"Certainly, certainly, my dear," said Doctor Woodville, temporizing.

She turned impatiently to the younger man.

"Ask me anything you wish," said he, gravely.

"Can you reach the cause of her illness? Can you remove it?"

"Partly, at least—without doubt," he replied unhesitatingly.

But when they had gone and Achsah repeated the young physician's words to herself, she saw that they meant nothing.

"You must spare yourself all you can," Susan said a few days later. "You look fit to be in your bed already. And now that Margaret will never work again——"

"O Susan, don't say that," said Achsah.

"We must look the truth in the face; and I seem to have known it all the time, only I would not own it to myself. I remember mother's sickness." And Susan covered her face with her apron and sobbed out her despair. "We have only your salary to depend upon. And what would become of us, of *her*, if you were to give out?"

"I shall not give out. Don't think of me, Susan. I can endure——" to the end, she would have said, but her face dropped upon her knees. The end! The dreadful end, when Margaret should be worn out upon the rack!

This very day there chanced to come a letter from Jacob. She put it away half read. When Death draws near everything pales before it. And when a fortnight passed and she did not reply, a second letter followed the first: "Dear Achsah, you do not write. I say to myself, 'The children at school are troublesome and she is tired.' But beneath this plea for patience I ask myself if I can have vexed you. Did I say too much in my last letter? Too much and too little, since I did not say all? Let me confess it now though I tremble as I write. (What if you understood *and are silent!*) I love you, dear. It cannot be a secret, though I have not dared own it to you until now. For myself I dare anything, but for you—Achsah, I could not have brought you here. But the spring draws on and I am going away. My presiding elder says that he has work for me elsewhere. He does not tell me where, but I am not afraid to go. I am not even afraid to try to make a home for you—a humble home. Would you despise it? A tent pitched in the wilderness for a time and then removed. Does it appall you, my love, with your quiet, orderly ways? I remember you said one day, 'How dreadful it must be to go you don't know where!' Achsah, the one woman in the world to me,—would it be dreadful to you?"

So it had come at last—when it was too late! She read the letter all through, saying at the end: "Too late!"

For how could she desert Susan, who had said, "What should we do if you were to give out?" And what had she to do with love—whose place, as God had appointed it, was to stand by Margaret to the end?

His home! A tent pitched in the wilderness for a little time! Would she despise it? Ah, he little knew her heart! An unknown future? What was that to her with him beside her. She confessed it to her—

self. She was not ashamed to own her love for him now, and she shed some bitter tears. Is not sacrifice acceptable even though offered with weeping? Then she prepared to write to him. Better now, while she saw her duty clearly. By and by her love for him might cloud her eyes. Even at this moment she was tempted to tell him everything. He had been very gentle and tender toward Margaret—would he not willingly share Achsah's dreadful burden? But she turned upon herself. What! was her love so selfish that she could thus fetter him in his work—making it only a struggle for bread? Rather let her drop out of his life. But again her heart pleaded for him. He would wait. His affection was not for a day, she knew, and oh, the comfort of this strong heart to rest upon.

Then Margaret's worn face rose to reproach her. God forgive her! Was she wishing for the end already? No, no; and the end was still far away. Doctor Woodville assured them that when the first shock of finding herself really ill had passed, Margaret might rally. She might even live for years; but she must never work again. Achsah wrote her letter and dropped it into the post-office the next morning—only a few words, but they changed the whole current of her life. "I fear you have expected a different answer," she said. "It grieves me to give you pain, but I cannot go with you." She entered into no explanation, she gave no reason for putting his love aside. She did not realize how cold and formal words may appear upon paper which have come from a burning heart. And she said nothing of Margaret's illness. When the letter had gone, she remembered that she had not spoken of it, and she shed a few tears over the loss of his sympathy in their trouble. For her own deeper loss she had no tears; it was beyond such expression.

There came a few broken sentences in reply—"Good-bye, and God keep you, Achsah! I deceived myself; but the dream was very sweet while it lasted, and I do not blame you. Perhaps some day we may meet again, and be friends. Now I must try to put you out of my thoughts."

And Achsah laid this letter away as we lay away the clothes of the dead.

VII.

SHE heard no more from Jacob, and it made her sore at heart to see how entirely he had dropped out of the thoughts of the

other two sisters. Once, after a paroxysm of pain, as she soothed Margaret with the cool touch of her hands upon the feverish forehead, the sick woman looked up into her face to say: "How could I live without you, my darling? You will never leave me?"

"No," Achsah replied. There had come such a fullness at her heart that she could not utter another word.

"You are sure?" Margaret asked, excitedly. "He will not take you away? It may be only a little while, Achsah. You will not let him take you away?" Her face was full of terror.

Achsah put her arms around her, and laid the poor throbbing head against her bosom.

"My dear! My dear! Nobody shall ever take me away from you." And Margaret was assured, and sobbed herself quiet.

They had given up their church journal at Susan's suggestion—Susan, who cared most of all for it; it was her only literature. But they could not afford even this luxury now. Margaret alone must suffer no deprivation. A chance number, however, fell into their hands, and gave to Achsah the information she longed to seek, yet dared not ask for. At the foot of a partial list of appointments for the year, among other names, unknown to her, she read, with a throbbing heart, "Jacob Doane, transferred to the Northern Ohio Conference." The last hope crept out of her heart. She should never see him again.

The following winter Margaret died. God was merciful. He sent his angel to give the poor creature rest. He laid his finger upon her and her pain ceased. For a little time she was her own sweet self again—grateful, loving, gentle. Then she fell asleep.

"Why not send for Brother Doane?" Susan asked, when they were making their preparations for laying Margaret away to her long sleep. "She would have wished it. And he would come—even if he had to walk, as he did before."

"He has left Durham and gone West," Achsah replied, trying to make her voice steady. "I saw it in the paper."

"And he has not written? I did not think he would forget us so soon," Susan said in meek reproach.

"O Susan! he has not forgotten us. It was I—I have never written since Margaret was taken ill."

And Susan suffered the matter to pass. Grief and cares pressed this from her mind.

The funeral over, there were bills to be met, ways and means to be devised. Sorrow is indeed a luxury not to be indulged in by the poor. Achsah went back into school. Her health was weakened. She was thin and without color, and she knew no tricks of dress to soften the effects of sorrow and long watching. Even if she had had the heart for these things, she had not the means. When they had paid the last debt incurred by Margaret's illness, denying themselves even food and fire that they might owe no man anything, they took counsel together. Should they give up their home and seek a cheaper tenement? Achsah could not bear the thought of a change. We can leave the places where we have been happy, but sorrow throws a sad charm about any spot. To think of a stranger in the room where Margaret had died! No, they could not go away. And when a respectable lodger offered himself for Achsah's old room, and Susan obtained work at plain sewing, and Achsah's salary by unexpected good-fortune was slightly increased, they decided to stay where they were.

Three or four years went by; there was nothing to mark any of them. Achsah had developed a quiet self-reliance in her time of trial which made her come to the front naturally now. Susan rested upon her;—poor Susan, who secretly mourned Achsah's lost good looks,—the red gone out of her cheek, the rounded outline of her face grown sharp. But in spite of these changes, strangers looked twice at her face; it had gained something in its loss.

All this while ministers came and went at the church on the hill. Perhaps the people were difficult to please, or it may be that the ministers were at fault, for no one staid out his allotted time. Sometimes these passing shepherds sought out the two sisters, but more often they were overlooked. The society was large, and they were neither rich enough to attract attention, nor sufficiently poor to seem to call for aid.

Five years after Margaret's death, one of these changes was taking place at the church. A stranger had been transferred from a distant conference to fill this appointment. His name had not reached the two sisters, but they had heard marvelous reports of his eloquence, of his devotion to his work, as well as of his success in his last charge.

Susan looked forward to the Sabbath—his first Sabbath here—with unusual interest; but Achsah was indifferent.

"He will come and go like the rest," she

said, "and he will never be anything to us but a voice sounding out of the pulpit."

"What is it about being a mouthpiece? I suppose they are all only that," Susan said meekly.

"But I like them to be a human presence, as well," Achsah rejoined. Then she put on her hat and prepared to go down into the town upon some household errand. Her way led her over the hill and through the park. Spring had come early this year. The buds were swelling upon the trees, the grass was already green in spots exposed to the sun. April though it was, there was a sense of awakening in her own heart. She moved on with a freer step, loosening the heavy shawl at her throat and throwing back her veil that the soft air might reach her face. The outline of her cheek was growing round again; her pain over Margaret's loss was changing to a gentle grief, as time bore it further away. Sharp anxiety had done its work and gone. The last few years had been peaceful, and even quiet and rest leave traces of their visits.

She came out from the park facing a row of sunny, handsome houses built substantially of brick and with a bay-window over the door of each. One had been unoccupied for two or three years. Achsah had come to have a friendly regard for the place. She had even said lightly to Susan:

"When we are rich, dear, we will live there ourselves," pointing out the advantages of its situation—overlooking the bay from its upper windows and with the elms from the park almost sweeping it in front. To-day the blinds were thrown wide open and Mrs. Cooper's face appeared at one of the windows beckoning her over.

"Come in, come in," she said, appearing in the door-way. "This is the new parsonage."

"But—I had intended to live here myself," Achsah replied, with a bewildered stare and only half pleased. Her foolish jest had taken an unaccountable hold upon her.

"You are entirely too late. Of course you are surprised; everybody will be; it was the parsonage committee. We were fairly ashamed of the old place, and I have had this in my mind for a year or two. You see we must do something—the new minister comes from such a wealthy congregation. Why, his predecessor actually kept a carriage! I don't know what 'the fathers' would say." And Mrs. Cooper laughed complacently over the changed times as she

led the way through the handsome empty parlors.

"And will the new minister set up a carriage?" Achsah's ideas were somewhat confused by Mrs. Cooper's running sentences.

"Now, don't be absurd, Achsah Bray. They say Brother Doane is a most earnest, sinple-hearted man, entirely above worldly vanities."

"Brother Doane?" They had reached the stair-way. Achsah sat down upon the lowest step.

"Yes, Jacob Doane. It is not possible that you had not heard his name! But don't sit down, you must see the upper rooms;" and she led the way to the pleasant front chamber overlooking the park, which she had already decided in her own mind should serve as the minister's "study."

"And this," passing into the little bay-windowed room over the hall, "will make a delightful sewing-room for his wife—adjoining the study, you see, and with a glimpse of the bay through that break in the houses beyond the park. A stand of flowers here, a brass bird-cage, a sewing-chair—really I can see it all," said Mrs. Cooper, with a happy laugh. "I only hope we may like her. So much depends upon the minister's wife, you know."

"And have you seen her?" Achsah had turned away to watch a white sail just dipping its way across the distant bay.

"Dear me, no; I have scarcely thought of her. We have had so much to do. It came upon us so suddenly; the transfer was only granted at the last moment. We know nothing at all about his family. You are very pale," she said, as she finally let Achsah out at the street door. "It was that last flight of stairs—but I wanted you to see the view from the upper windows."

Achsah said something in reply and hastened away. She had reached the lower town and passed the shop where her errand lay, before she came to herself. Jacob Doane! And they were to meet again after all these years! But no, it was scarcely probable that they would meet. There was a vast gulf between the Jacob, untried, unknown, who had sat by their fire, and the minister, eloquent, successful, who was coming to stand in the pulpit of the great church on the hill. He had said in that brief last letter that some day they might meet again and be friends. But would he seek them out now? When once there has been a break

between people, circumstances come like wedges, driving them farther apart. Susan and she had seldom met the ministers of their church. It would hardly be different now. He would be to them only a "voice from the pulpit." Better that and nothing more, she said to herself as she passed the new parsonage again on her way home over the hill. For the first time Achsah realized that she had cherished a hope all these long silent years which must be rooted out of her heart now, even if by fire.

VIII.

A SLIGHT indisposition kept Susan at home from church the next morning and Achsah went alone. She had debated in her mind whether or not she would go. But her desire to see Jacob, even under these new conditions, overcame her reluctance to put herself to this trial. In the great congregation she would be unnoticed. Then, too, she must accustom herself to hearing his voice—to hearing his name, which until now had never been uttered in her ears outside of her own household. It would be wise to begin at once. But she had hesitated so long that it was late when at last she entered the church. The singing and the long prayer were over; the minister had begun his sermon. Already in Achsah's mind Jacob had taken a new place; he was "the minister." She slipped into a seat by the door, under the overhanging gallery. The light in the church seemed dim after the glare of the sun outside. At first she could distinguish nothing clearly. Even the tones of the speaker's voice brought nothing to her ears but a remembrance (Jacob's voice had always held a charm). Gradually his form took familiar shape. He had lost much of the old stoop of the shoulders; his bearing was more erect, his features more clear-cut and less rugged than she remembered them to be, his manner more assured; he was Jacob still, but Jacob brought through a refining fire. And yet the long, dimly lighted church, the years since they had met, even the newties which had utterly sundered their lives, were as nothing to that other intangible distance between them as his words took hold of her at last and showed her heights of which she had never dreamed and depths of thought which no plummet from her mind had ever sounded. But at the close of the sermon, when he leaned over the pulpit and talked to the people before him as man to men,—weak, erring, yet

struggling toward the light,—Achsah forgot herself and was comforted.

They sat alone in the long spring twilight, Achsah and Susan. It was the hour which brought Margaret very near to them, especially upon Sabbath evenings, when there was no pretense of work. They had been talking of the strange chance, or providence, as Susan called it, which had brought Jacob to be their minister. Achsah spoke of him calmly. "You must hear him another Sunday," she said; "his words are like strong hands to lift one up." There came a pull at the bell. "It is the lodger, he has forgotten his key again." And Susan went to let him in. But instead of going up the stairs, heavy steps followed her to the back parlor door, and a strange form stood waiting in the door-way as she stepped aside to let it pass in. Achsah sprang up to strike a light, but she trembled when its quivering rays fell upon the new minister advancing out of the darkness.

"I was obliged to announce myself to Miss Susan," he said in a constrained voice. "I hope —"

But Achsah had already in her surprise pronounced his name.

As the light flared up he had glanced quickly about the little familiar room. Nothing had changed except that the signs of Margaret's occupation were gone. Her sofa stood vacant in its old corner.

"I only learned of it to-night; why did none of you ever write to me that she was ill?"

"I told Achsah you would come,—even if you had to walk," Susan broke in irrelevantly.

"Nothing could have kept me away," he answered in a repressed voice. And though Achsah offered no excuse for her negligence, she blessed him in her heart for the reproach in his words. He had not forgotten them, then!

The constraint of the first moment had vanished at this touch of sympathy over Margaret. They looked into each other's faces with solemn, tender eyes.

"Sometime, you will tell me more," he said. "To-night I can only ask, 'Is it well with you?'" His eyes rested upon Achsah. Hers were full of tears, but she answered calmly, even returning his gentle smile.

"Yes, it is well with us."

With him it was well, she knew. There was no need to ask.

But Susan was not so easily satisfied.

"And you? Tell us about yourself," she said, setting out a chair for their visitor, and trying to speak in a cheerful voice, though wiping her eyes the while. "Your family?—are they here?"

"I have no family; I have never married."

There was a pause. Achsah's heart beat fast. His reply had stirred the deep waters under the still ice. She dared not look up or speak.

"You will let me give you a cup of tea?" said Susan, making a move to cover the awkwardness of the moment, which she felt, but did not in the least understand.

"I am expected back; but —" he glanced at Achsah, whose eyes were on her hands in her lap,—*"I cannot refuse."*

So Susan bustled away, closing the door after her.

"I could almost imagine 'now' to be 'then,'" Jacob said after a silence. "Tell me, Miss Achsah, if it will not pain you, was she ill when you wrote that letter to me?"

"Your letter came the very day we knew—the day we were sure that there was no hope," burst out Achsah, covering her face with her hands.

"And if it had come before? Would your answer have been different if it had come before?"

She was sobbing, but she did not speak. He put his arms around her.

"My poor girl! my darling! Why could you not have trusted me?" he asked.

"Must I serve yet, other seven years, Rachel?" he asked when he went away.

Sometimes our thoughtless words prove prophecies. Achsah and Susan went to live in the new parsonage on the hill before the trees in the park had shed their leaves.

"To think," said Mrs. Cooper, ruefully, "that all these preparations should have been made for only Achsah Bray!"

But Achsah developed wonderfully after her marriage, Mrs. Cooper declared,—Mrs. Cooper, who saw only the flower which love had made to bloom, and knew nothing of the strength that had come from wind and rain and the striking of the roots deep into the soil of adversity and pain.

WAS IT LOVE, OR HATRED?

I HAD seen something of certain parts of the State, but was a fresh arrival in the little community of Jocyldown and knew very few of the inhabitants well before an affair occurred which placed me at once on the footing of the oldest citizen. The hotel was the only brick building in the place,—a new settlement on the plains which has since become a thriving center of two railways,—and, in the hotel, all that was of brick was the front. Compared to that of the log-house opposite it was imposing, for there, Jocyl, the oldest inhabitant, had passed a lonely existence before he laid out his farm in building-lots, and started the new town by the simple expedient of running up the hotel. Next door to the hotel, on either side, were the two principal stores of Jocyldown, built of pine and clap-boarded, and across the way, close to the log-hut with its lean-to addition, laborers were digging the foundations of a Methodist church. The main hotel was not so high in the eaves as the brick front, but it spread over a good deal of ground, and an extension had been run to the rear with two elbows, so as to bring the rear back again to the line of the street, beyond one of the stores. This addition had a door marked "Ladie's Entrance," and Jocyldown was not long in finding out that it had been well named, for at least one lady, and a very pretty one too, was in the habit of coming in and out that way. Well, in this rear extension the sensation had its start, for a young married woman had been found one morning severely stabbed, while her husband had left town suddenly on a horse belonging to the hotel-keeper. When discovered she could not speak, but she made no sign of denial when asked if her husband had stabbed her. This was enough for the inhabitants of Jocyldown. The lady had been seen and admired for her beauty; of the husband little was known, save that he never stood treat at the bar, and seemed a moping sort of fellow who kept aloof from folks, and put on airs of superior learning. At the store, where he was acting as chief clerk, he served his customers with as few words as they would allow. He had made a horrible assault with intent to kill, and probably had succeeded in his purpose. The men who met together at the bar were convinced of the fact, and decided

that parties should start at once in search of the offender.

"It aint actually necessary to bring him in," said the leader in this decision, as he separated with his party toward the north; "what is most to be looked after is, that he don't get further and try it on again! He's a horse-thief, anyhow."

With these indefinite instructions clearly enough understood, we turned westward and struck out into the prairie.

I had two reasons for accompanying this party. One was, that in this direction I knew the land pretty well, and might very likely come across persons with whom I was acquainted; another was to verify a theory I had picked up from somebody. I had been told that fugitives, unless they have some definite plan of flight, are more apt to run to the west than to any other point of the compass. From the general aspect of the case, I was pretty sure the crime was a hasty one, and the criminal a man without a fixed purpose. The road we followed was so full of tracks that nothing could be done in the way of tracing the criminal by signs. Our only plan was to follow the old-established trail until we met some one who might have seen the culprit. We had ridden about twelve miles before a turn occurred in the road. At a point where the plain rose to a ridge before flowing up toward a hilly country with some timber beyond, it turned abruptly to the south. Just here my theory stood me in good stead, for I watched the edge of the trail sharply as we made the bend, and there, sure enough, were fresh tracks of a horse between the thin wiry grass, and pointing to the westward! Without a word of comment my companions turned their horses and we all rode a little way at a trot. Presently I began to look about me and recognized the locality.

"We have him," said I. "He has put up at Clark's, over on the oak barrens."

At this name my companions looked grave, but then, justice must be done, and they had the orders of the community.

"How many miles?" said one.

"Six, or seven."

"Humph! Sandy road, too, most of it, I'll be bound. If we rest the horses now, we can fetch it by sunset."

It was after sundown when we arrived,

owing chiefly to my uncertainty of the road. However, as long as there was light, we were certainly on the right track, supposing always that the hoof-marks we were following did not belong to some one else. Later on it was needless to see them, because there was no house except Clark's in the neighborhood. I was a little nervous at what our reception might be. Clark was not the man to allow a lot of fellows to surround his house after dark without a protest that might send more than one saddle home empty. I suggested that one should ride ahead and knock Clark up, while the others should follow immediately on the sound of parleying.

It was black as pitch as I rode up to the frame dwelling-house. It had been built in a city many hundred miles away, and put up here in pieces brought by rail and ox-carts across rivers and prairies. In that rough piece of country it looked by daylight as if it had dropped from some city which had taken to traveling through the air; at night a stranger coming upon it would not have believed a modern frame house possible in such a spot.

"What the — do you want, anyhow?" cried Clark from an upper window after a prolonged siege of knocking. Knowing that he must have a rifle in one hand and a pistol in the other, I hastened to name myself, and begged him to come down and let me in. This he proceeded to do with a much better grace than his first words might have led one to suspect; for, with Clark, oaths were of little more account than extra breaths; they served as convenient points in his discourse for putting on the stress of voice. Emphasis is a difficult matter to arrange for the best of us; but Clark's arrangement was simplicity itself, for he used imprecations merely as stepping-stones down the shallow river of his discourse.

"There's a man put up here that we are after," said I. "He's cut his wife pretty badly down at the hotel in Jocyltown, and gone away on old Jocyl's mare. We want you to give him up."

"Now, hold on," said Clark, stepping back. "You're my friend, and I calc'late you're fair, but who the — is 'we'?" There is a man put up here, I wont deny; but I don't give no man away; I want you to understand that."

"Why, you don't want to protect a murderer, do you?" said I.

"How do I know he's a murderer? You say so, and I wont give you the lie. But

I don't really know anything about it. The man's in my house, and while he's there, he's safe."

While we parleyed, my companions had put the horses in the barn, and now came up. The elder moved directly behind Clark into the door.

"Hey there! — you, who asked you in there?" cried Clark, cocking his pistol and leveling it. There was just light enough from a candle in the passage to take good and infallible aim.

"For heaven's sake, Clark," said I, catching his arm, "we are not on the fight."

"Yes, we are on the fight," said Brown, the man who had stepped in, drawing his pistol with a quick motion. "I am, if my power is resisted. I'm the law, I am. See here."

With the other hand, and still keeping his pistol on Clark, he pushed the lappel of his coat aside and showed the metal badge of a sheriff. Clark's arm dropped at once and we all went into the house.

"Damn me if you'd have got in to-night, sheriff or no sheriff," said Clark discontentedly. "What the —! I thought you was alone."

We had entered the sitting-room, and while I busied myself with lighting a lamp and stirring up the fire in a stove at one end of the room, Clark and my two comrades roused up the offender. Presently all four made their appearance. My companions were solemn; Clark was surly and fretful, while the prisoner was pale and trembling.

"Sit down by the fire and tell us all about it," said Clark roughly, but with kindness, pushing up a seat and pouring him out some whisky in a tea-cup. The whisky seemed to do the prisoner good, or else the heat of the stove allayed his fit of trembling. His dull look of misery gave way to more intelligence as he gazed from one face to another. Somehow he was not a man you could be hard on.

"Is— is she dead?" he finally managed to stutter, looking wistfully around.

"Not yet," said Brown, the deputy sheriff, sternly.

"Ah!" shuddered the man, "I hope she wont. I hope she wont. I have no hard feelings against her—none at all."

"Perhaps it's the other way," suggested Randall, taking a piece of navy-plug out of his waistcoat pocket, and with his penknife shaving off a piece of a shape and size peculiar to himself. He offered the black cake of tobacco to the prisoner as a kind of mute

testimony that his words were not meant to be offensive, but the latter shook his head sadly. We had all drawn up around the stove, and Clark brought out a demijohn of the right stuff, and two or three thick glasses, such as they use in bar-rooms. We lay back in our chairs and rested our feet, tired with many hours in the saddle, against the projecting foot-rest which ran around the red-hot stove.

"I'm very sorry it has come to this," said Brown, after a few moments; warmth, rest, and the whisky having somewhat subdued even the austerity of a deputy sheriff. "You really hadn't ought to have done it, Mr. Pierre."

The man he addressed as Pierre was still young, rather slight of build and dark in coloring. You could see at a glance that he was of a nervous temperament, and in the lamp-light his eyes shone with a strange effect that might be termed a glare, somewhat like those of a hunted animal at bay in a dark thicket. From the womanish way in which he sipped his whisky, it was evident that he could have done very little drinking in his life. Whatever was the cause of his crime, rum was not. It must have been more the alcohol than the heat of the stove which brought some color back into his cheeks. He shook his head mournfully at Brown's words, but life was not so gloomy as it had seemed a few minutes before.

"Well, how did you come to do it?" burst out Clark, whom curiosity, as well as disgust at the invasion of his rights of hospitality and asylum, rendered fidgety and talkative.

Still Pierre would do nothing but shake his head and sigh. In view of having to stand a trial it was not to be wondered at that he would not commit himself. But I knew that perhaps he might never come to trial at all.

"You don't look like a man who would strike a woman," said I.

The prisoner started and gave me a quick, full look of gratitude. He could be silent no longer.

"I swear to heaven," said he, "that I never laid hand on that woman before. Much as I have been provoked,—or ——" here he hesitated,—"irritated—I never struck her. What happened last night was the affair of a moment. The first thing I knew, I was riding out of the village and feeling that I had stabbed somebody."

"And taken somebody's horse," added

Brown, dryly, the first flush of the whisky having expended its softening effects.

"Oh! I was going to send the mare back."

"Ah!" ejaculated Brown, with satire quite lost upon the prisoner.

The ice being broken, and the whisky having had its effect on his tongue, he now leaned back in his chair and spoke as follows:

"I might as well tell you, gentlemen, how it all came about,—at least, as far as I am able, because there are points in my experience I can't pretend to account for. The woman I hurt so badly the other night is my lawful wife; I never cared for any one else but her, and when I married her, I doubt if there were a happier bridegroom in the land. Happy isn't the word: I was mad with joy and I acted in such a way that everybody was making fun of me. I saw them well enough. They thought I was blind to their ridicule, but I took it all in. Only my delight at getting Lou—that is the name of my wife—was so great that I didn't care a straw for ridicule or anything else. Well, I had had hard enough work to get her, that's a fact, and my marriage was the triumph of three years of as great misery as I can think of. This business is bad enough, but I would rather swing than pass such a time as I did then.

"You may suppose from my saying that I had hard work to get her, that the match was uneven, or that there was something against me, or that Lou didn't like me. Not one of those things is true. I was making a little money, had a reputation for perfect steadiness, never drank, belonged to a church and taught in Sunday-school. Lou hadn't a cent, never doubted my character for squareness, and took a liking to me from the first. In fact I was always bashful and never had taken to girls, while Lou had got quite a name for being a belle when I began to follow around after her. Folks actually thought better of her for having me attentive to her. That is only to show you that there was nothing against me in any way, shape or manner. Well, that was the beginning of it all. I was so well received that I was certain all was right, and I suppose that turned my head a little. I just let up brakes all around, and if I didn't just love that girl! There wasn't anything I wouldn't do for her. Well, she didn't quite understand it all. I sometimes think women don't know what love is; at least they don't love the way we men do. They are cool, and seem to be able to think of

something far ahead when the man is half out of his mind with the pleasure right there. Pretty soon she began to fight off and dictate terms. That was all right enough; I submitted, and would have stood almost anything. But next thing that happened she broke the engagement. Then I went to see her and we had a fine row. She told me she didn't care a button for me, and I must keep my distance, and all that sort of trash. Well, I saw pretty soon that she didn't care for anybody else, and did care for me; and so after a blow-out the matter was patched up, and we were thick again as ever. After this she was more loving, but pretty soon the same thing occurred again. This time I was furious and stayed away. Well, she stood that about two weeks and then dropped. I was about dead by that time, but I had determined not to make the advances, and so she had to. Well, gentlemen, I'm making too long a story. That is the way she acted a great many times. To say I loved her all through would not be true. On the contrary there were times when I hated her so that I lay awake at night just to think over what could hurt her most. Why, I have had long plans mapped out to humiliate and shame her, and it was only by keeping my memory jogged every now and then, and recalling that a man has no business with such dirty, small work that I saved myself from putting them into execution. There was one thing I noticed, however. When I was near her I couldn't be half so vindictive as when we were apart. Out of sight I could ponder over the most ingenious plans for her ruin and harm, but when she was by there was something in her eyes or the turn of her head that made a baby of me at once. It was that—whatever it may be—which prevented any such move on my part and brought us together at last before a clergyman in church."

Pierre had become absorbed in his remarks and now reached automatically for his glass, which Clark had filled again with whisky and water. It seemed to do him good to talk, and all the rest of us were so much interested that we not only said no word, but forbore to look at him, lest something might interrupt the flow of his confessions. Weariness, warmth, the liquor, and, somewhere in the air, the feeling of a tragedy, combined to throw such a spell as most easily turns a man to loosening his inmost secrets from the cells where he has meant to keep them forever. The tallow

candle burned dim and the stove took on the dull red glare of forged iron. It made no difference that the room and its contents were bare and vulgar, or that the men who sat about the cheap, ugly fireplace were rough in exterior and of minds different one from another; a common interest was occupying them. It was one of those occasions when everything conspires to knit individuals into a composite group, animated by one life. So strong was this feeling of fellowship that the prisoner evidently found it difficult to remember that his position was a dangerous one, or that three of the five men within the four walls were at least his jailors and possible even worse.

"So we got married after all," continued Pierre, only stopping long enough to address himself to his tumbler, and never taking his eyes off the dark top of the white-and-red-bodied stove, at which we all were staring. "I suppose you are married men, gentlemen?" he said, and for the first time looked up quickly. Brown nodded gravely and assumed an answer for the rest of us; and the speaker was too busy with his recollections to consider whether Brown had a right to act for any of the others. "Well then, you know what it is to be married, speaking in a general way, and what a very different thing marriage is to the idea most young men form of it. I won't deny it, I am cursed with a bad temper, and every now and then it masters me. I had consoled myself all along with the reflection that when once the ceremony was performed everything would be well, at least as far as my troubles of courtship were concerned. I soon found, however, that very much the same thing was to be my lot even after all I had gone through with. You are married: you know what an awful hold a wife has over a man, especially if he is perfectly steady, loves her to distraction, and never looks at any other woman. Well, that was the kind of man I was, and having found it out pretty thoroughly, Lou began a systematic course of tyranny. So far from having left behind me the anger that used to overcome me before marriage, on the contrary I often found myself hating her worse as my wife than formerly as my intended. You will understand me. I had learned to require her presence as an absolute daily necessity. Once I had merely looked forward to a union with her as the great delight of the future. She was master of the situation, therefore, and dictated

terms; for my love for her was so intense that I could not bring myself to play the bully, and would do anything rather than look at another woman. It seemed to me an insult to love to dispute her commands. If she was unreasonable and demanded wrong and silly things, if caprices bent her this way and that and made us both uncomfortable, there seemed to be only these alternatives: either to convince her and get her to yield peaceably, or else to give way myself.

"It is needless to say that the latter was almost always the result. Many is the time she has gone to sleep in my arms, and morning has found us in separate rooms,—she all coolness and scorn, and I with the vilest hatred bursting in my heart. Why I have not killed her long ago I do not know. She was so sure of me, and so unconcerned that I should take advantage of greater strength some day to subdue her, or do her bodily injury, that it afforded her an additional pleasure to brave the rage she saw was consuming me. Sometimes, when I was at the worst, I have said to her: 'Have a care! There is a limit to all things,' and she would answer with a burst of derisive laughter. Ah, that she had taken a little notice of her danger!"

Pierre sunk his head between his hands and sighed. Perhaps the motion may have had to do with moisture in his eyes.

"Yes," he went on, "it did come, after all. Never mind what the last cause was,—the final blow to my resolution. I am telling you now more than I have ever breathed to human being. There was no reptile on earth, no devil in hell, that did not seem good to me beside that woman. I felt I must kill her, if it were only to rid the world of such a pest. There was a sense all through me that her death would rest completely something that was tired and worn out, all inside my veins and nerves; as if her blood would cool some fever that had been accumulating for years. Perhaps I have never forgiven her the unnecessary cruelty of our courting days. Perhaps it is only the tortures she has inflicted since marriage which affected my very flesh. At any rate, the longing for revenge was perfectly satisfied by the act. At each blow I gave her the other night, the black cloud that had hung over my heart lightened, and I believe—God forgive me!—that I kissed her when I left her!

"Love her?" he cried passionately, after a pause, and rising from his seat. "Yes, a

thousand times more than before I gave her those cowardly stabs. I feel like a parent who has been forced to beat the child he loves most in the world. But I—unhappy wretch!—have committed murder, and, instead of hurting her a little, have destroyed the only thing that makes life tolerable. For without her life will be intolerable, that I know. Ah, why did I hurry away? What a fool I was! After being such a coward as to touch a woman, I might have had the courage to face it out. But my mind was in a whirl, and something—somebody—said: 'Get a horse, quick, and fly!' And so I did. Could it have been Lou said that?"

Pierre stared out fixedly into space, with the round-eyed look of a man trying with all the might of his memory to recall a scene. Our host had been watching him breathlessly during his recital; whenever I stole a glance at Clark's hairy face I could see that he was not the least moved of the company. A few moments before Pierre stopped, however, Clark's eyes narrowed into a crafty expression, and, rising softly, he opened and ransacked a small drawer in a chest near the wall. His manner was so peculiar that it attracted my attention. It meant that what he wished to avoid was our attention. From the drawer he extracted certain large cigars of a dark color, and during the next few moments, while changing glasses and refilling the tumblers, he managed to substitute one of these for the fresh cigar lying on the chair or table which stood by each man's seat. Brown took up his and lighted it. Randall followed suit, and held the cigar to his nose, at the same time raising his eyebrows in the direction of Clark. Our host nodded, as if to say: "Try it; it's first-rate," and as he caught my glance, relapsed into his chair uneasily. I, too, smelt of my cigar, and placed it unlighted between my lips. While Pierre stood gazing, in deep thought, Clark came around to me with a lighted match for my cigar. After a moment's hesitation, I took it, and lit the tobacco. It had a pungent and very peculiar odor, so that I thought it wisest to pretend to smoke it without doing so. My precaution was justified a moment after. Brown's head had fallen back on his chair, his mouth was open, and he was in a deep sleep. The cigar lay on the ground. Randall had folded his arms upon the table, and his long breathing told that something—perhaps the whisky and the monotonous voice of the speaker, perhaps something else—had sent him into a heavy slumber. I was drowsy myself. The

room was close and warm. I threw my arms over the back of a chair near me, and, laying my head so that I could see every one on opening my eyes, shut them close, and soon was in a state of semi-consciousness which was not sleep, but certainly was not being wide awake.

Pierre at last roused himself from thought.

"Yes, gentlemen," he continued, blind to the fact that he had talked a long while and that most of his audience could not hear him. "I am not only a criminal, but a vile coward to have run away. Oh," he cried with a sudden turn of feeling, "I must see her, even if she is dead. But what keeps me here? Let us go back at once."

"No, you wont," said Clark, rising up and seizing Pierre by the coat. "You wont do no such thing."

"Good heavens! I had forgot. I am a prisoner. But we are going back, anyhow. Cannot these gentlemen understand my position and take me back now?"

"These gentlemen," answered Clark, with a derisive gesture at our sleeping forms, "are not able to get into a saddle, not to say sit in one. Besides, they have no orders to bring you back."

Here he grinned in Pierre's face and caught himself under the chin in an ugly and suggestive manner. Pierre turned a little pale.

"Sooner or later," he said firmly, "it makes little difference, except that I must see Lou before I die. Must?—I am a prisoner."

"Wal, now, pard," said Clark, moved by the sharp tone of despair, "I reckon you wouldn't flinch at the last, would ye? But as for being a prisoner — What made ye take old man Jocyl's mare?"

"I took the first horse that came to hand. I meant to send it back."

"Well, I believe you, and thought you was square from the first. I don't mind the woman so much—that's none of my business—but the mare! I tell you it ud go ag'in my grain to help a hoss-thief!"

"No, no, no; of course I'm no horse-thief," said Pierre impatiently. "But what do you mean by help?" His face had grown bright with hope.

"Aha," said Clark, "now you see light ahead. Go back to Jocyltown indeed,—not much! Do you see them fellows? Opium—opium did it. Just a whiff of it and off they go sound as woodchucks, and good till twelve o'clock to-morrow morning. Now, then, you just hop on to my horse, take the road I

tell you, and light out. They'll never ketch you, or my name aint Clark."

Pierre said nothing, but his face was joyous with a solemn kind of gladness. He only grasped Clark's thick hand and shook it over and over again. They disappeared at once from the room. To all intents and purposes I was asleep,—at least so I argued to myself,—and had no call to interrupt their proceedings. My best occupation was sleep, and to this I turned with such entire success that the sun was high in the heavens before we discovered that our bird was flown.

Brown, Randall and I rode into Jocyltown at a sharp pace the next day with the missing mare, and didn't care to talk to anybody until we got into the bar-room, where we told our story. I was rather surprised to find how little effect it had on the audience. Instead of breaking out into curses against Pierre, they received the news of his escape very much in the light of a good joke on us. Old Jocyl never knew what a joke was, or else thought it was some form of expense to laugh, and therefore systematically refrained. There was a peculiar vein of regret in his voice, when he said:

"I suppose you don't know that she's mending—doing well, the doctor says."

"Don't say!" said Brown. "Well, women folks do hang on to life; they beat cats. That Pierre is a lucky fellow to have lit out just when he did. If he hadn't, I don't believe he'd have ever known he wasn't a murderer."

"Taint like you to do things by halves," growled Jocyl. "But who's goin' to pay for the two days' use of the mare? I don't see how I'm to get even anyways, what with a wounded woman in the house and you lettin' the husband escape!"

"Bother the old mare! You may thank me for gettin' her back at all. But, as to the man, there's no two ways about it, Clark must have drugged the liquor. No straight whisky would have fetched me that way."

"Or the cigars," I suggested; but no one took the trouble to listen to what I had to say.

"I never was so fooled in my life," said Brown, with several gentle oaths. "If ever I catch that fellow alive, I'll take him by the ear and walk him right up to that pretty young wife he's been a-carvin',—and what she says to do that I'll do, if it's to hang him instanter!"

Everybody chimed in with a chorus of approval, for Brown was standing treat at the time, partly to relieve his feelings, partly

with a shrewd idea of taking the edge off the natural resentment of the crowd at the loss of Pierre, and partly to stop the mouths of the jokers at his expense. I had stepped to the window, when I saw cause to give Brown a private signal to come outside into the entry leading to the front door. Pulling him out on the veranda, we perceived a man alighting hurriedly from a weary horse. As he walked unsteadily up the steps, we saw that it was Pierre. Brown was so surprised that he hadn't a word to say. I stepped forward.

"What are you doing here?" I asked in a low tone. "Don't you know your danger? Or have you heard the news?"

"What—what news?" gasped Pierre, leaning up against a pillar white as a sheet. My questions were confusing. "You don't mean she's —"

I did not answer at once, for I, too, was at a loss. Did the fool expect to find her alive after he had tried so hard to kill her? Was he hoping she was dead, or did he fear to hear that she was?

"She's going to get well," said I, sullenly, feeling thoroughly disgusted at the bare idea that he might still wish her ill.

Pierre started with an inarticulate noise, and hurried along the veranda to the "ladies' entrance"; but Brown was before him.

"Where are you going?" cried Brown, seizing him roughly by the arm and swinging him round. "You're my prisoner. You don't get off this time."

"I must go upstairs to see her," said Pierre, setting his teeth.

"Right, you must," said Brown, wrathfully. "But I shall take you there, mind that. I've sworn it."

"Then, come on!" cried Pierre, pushing open the door and hastening upstairs with Brown at his elbow. I followed, without stopping to ask myself what business I had there. At the head of the staircase was the door of the room; Pierre stopped and drew himself up with surprising dignity. His tone would have imposed on bolder men than Brown.

"Gentlemen," he said, "stand aside. This is my wife's room!"

Involuntarily we stepped back and Pierre opened the door. The bed stood opposite, at its head sat the doctor, and in it, propped up by pillows, was his young wife, still wonderfully pretty in spite of her thin white face and grief-darkened eyes. Her inborn tact had kept her sweet-looking and coquettish

even under these circumstances, where the doctor was the only visitor that could be expected to enter. Pierre leaned speechless against the door-post, unable to advance, retreat, or shut the door from our profaning eyes. His wife's eyes were closed, and the long dark lashes made her face even more charming from the childlike effect they gave to her countenance. At a low exclamation from the doctor, she opened them wide on the door with the three men standing within and beyond. But plainly her eyes saw only one, for they dilated with joy, and fairly blazed upon poor Pierre who stood vacillating in the door-way.

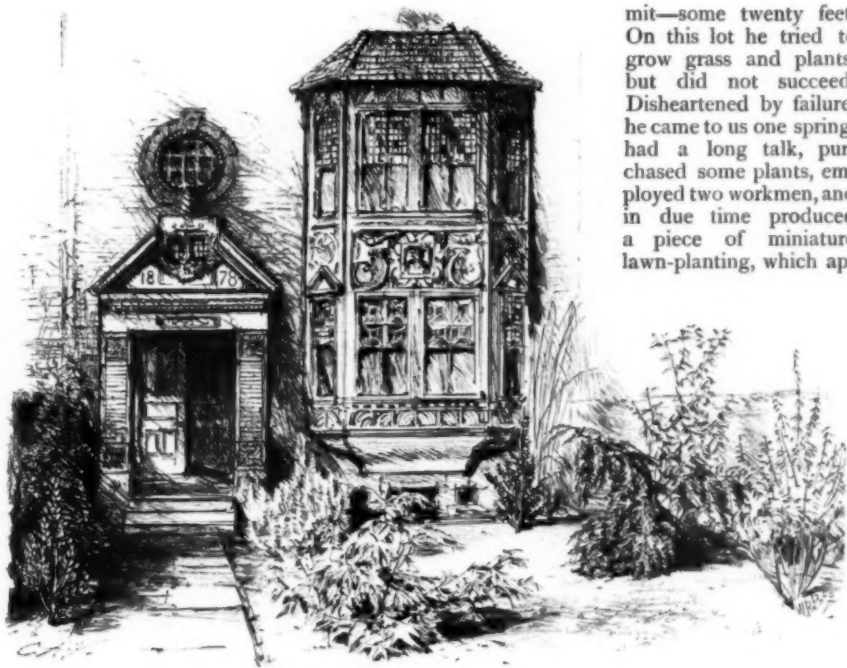
"I knew you would come back," she cried with a little hysterical shriek. "You have forgiven me, I know," she went on, as Pierre ran across the room and, dropping on his knees by the bedside, raised his hands to her in a dumb appeal for pardon. "And I—why I never have known what it was to love before; I promise never to torment you any more. I will be a good wife. Promise to pardon me and never go away again!"

What Pierre answered, and what he felt, Brown and I never knew, for the doctor sprang across the floor into the door-way and pulled to the door after him. Pierre could not have felt meaner than Brown and I thought him, for the woman's beauty, her lovely ways and her generosity in taking all the blame, made us ready to fight anybody and everybody on her behalf. We followed the doctor down-stairs in silence and made our way at once to the bar-room. Only oaths and whisky could relieve, in some little degree, the unwonted emotions stirring in the mind of Brown. It was in a silence big with imprecations not yet ready to burst, that Brown, with a sweep of his arm, ordered up every man and lounge to drink.

Then the torrent fell, and chiefly on the head of the ruffianly husband who could put cold steel to such a lovely bit of humanity as Mrs. Pierre. But at the end there was a breathing space to take a calmer survey of the whole affair and look at it from other stand-points.

"And yet," said he reflectively, "to see the way she took him back again! That knocks me. Why," he cried, looking around and bringing his clenched fist down on the walnut, "I do believe he begun wrong. There wouldn't have been any fuss at all, if he'd only have knifed her a little *first off!*"

LAWN-PLANTING FOR CITY AND COUNTRY.



DESIGN FOR PLANTING A CITY LOT.

I.—A CITY LAWN.

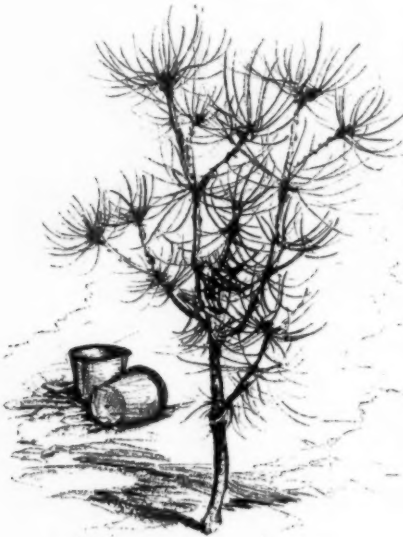
TRUE lawn-planting confined to the dimensions of a city lot seems almost an impossibility. Indeed, under such conditions, the creation of landscape as ordinarily understood can be sought no longer unless we attempt it "Chinese fashion." If, however, we use Chinese or Japanese plants they should be American grown and employed in American fashion. It is, in fact, a difficult matter to plant a city lot permanently on account of hot pavements and walls, and cold currents of wind. Many plants fail altogether, others pine, and others grow too large. Knowing indeed the frequent failures of such undertakings, we feel impelled to describe to the reader how we once planted, or helped to plant, a city door-yard, and how it looked when it was done. A friend had a lot on which he had erected a house as far back from the street as convenience would per-

mit—some twenty feet. On this lot he tried to grow grass and plants, but did not succeed. Disheartened by failure, he came to us one spring, had a long talk, purchased some plants, employed two workmen, and in due time produced a piece of miniature lawn-planting, which ap-

pears in our illustration as it looked after ten years of careful fostering.

Creation of turf was, of course first attempted. The lack of well-grown turf is almost fatal to the beauty of any possible selection of plants. Here, where all is foreground in a certain sense, a large amount of the general tone and color of the place must come from turf. Ornamentation becomes in such cases more like the decoration of a room. The turf must make the carpet whereon the ornaments are to be arranged. In this case the unsatisfactory grass was replaced by a turf of ivy planted at intervals of eighteen inches, so that a thick mat of foliage could readily develop. On fences and buildings, ivy often freezes badly, but on the ground it is hardy and luxuriant. The lower part of the fence of our lot, however, was covered with it and it formed a fine contrast or relief for other plants.

The ivy turf recognized as the predominant feature, what plants do we notice first? Here by the gate is a Japanese maple, one of the twenty-five varieties known in this country. It is nearly the most noteworthy plant in the lot, and demands our attention still more because it presents one of the best instances of what the Japanese can furnish us for lawn-planting in America. The maples of Japan are perhaps most free from the peculiar characteristics that make so many plants Japanese born and bred, wonderful, but not beautiful, in our eyes. These maples are miniature trees, with a free, full development that suggests neither deformity nor stunted conditions. Their dimensions would not in twenty years increase enough to unfit them for city lots,



PARASOL PINE. (SCIADOPITYS VERTICILLATA.)

though they never should receive a touch of pruning-knife; and as to hardness, we can only say that in this respect they equal any American maple, with the added toughness of all dwarf trees. We have already noted in a previous paper how beautifully the leaves of these maples are variegated during summer, white, green and yellow mingling on the same surface, and how these same leaves are divided and subdivided until they become mere shreds of tissue. It is always curious to note that the most diminutive and com-

plex types belong to the hardest and dwarfest varieties.

But we have not done with Japanese plants. Along the walk directly back of the Japanese maple is a golden Japanese cypress (*Retinospora plumosa aurea*). This arrangement has been intended to produce contrast between evergreen and deciduous plants, between a larger and more erect form and one smaller and more compact. The winter effect of the lot has also been considered in using evergreens, although it should be noted, at the same time, that evergreens are especially difficult to grow on city lots. Occasionally they will die and they always require more skill to keep them healthy than deciduous trees or shrubs. The Japanese cypresses or retinosporas, as a group, have a remarkable fitness for city lots, considering the fact that they too are evergreens. True, certain varieties grow to a considerable height, but most forms are slow and of moderate growth, if they are not actually dwarf. Their forms are indeed legion. They are drooping or erect, fern-like or lichen-like, and even pass into curious thread-like shapes. In color they are golden, variegated and green, but chiefly bright, glossy green. At the time of the formation of this tree its size is about a foot, although it is by no means young. In future its spray-like forms will grow considerably, but pruning, to which it is specially amenable, will readily restrain it, without danger of malformation. This peculiar ability to bear with utmost ease the strain of pruning distinguishes *R. plumosa aurea* above most other evergreens and makes it well fitted for city planting. The general color of its foliage is a broad suffusion of gold, which, when the plant has been pruned systematically, remains unusually bright in winter. No other evergreen, perhaps, equals it in this quality, and it is a quality very valuable for city lawns, where bright and varied color in winter is specially grateful. It is easily transplanted and might be common, for it is easy to propagate. The general appearance of these retinosporas resembles that of an arbor vitæ, only they are more varied and spray-like in form, richer in coloring, and hardier and better in every way.

On the other side of the door-yard we have a Japanese snow-ball. The supreme excellence of this shrub lies in its rich nature. Everything about it is excellent. The soft, brown, fuzzy stems, the dark-green, heart-shaped leaves, piled in pictur-

esque masses when the plant has been properly pruned, and above all, the large, pure white snow-ball flowers make it very choice and attractive. Indeed, the contrast between the shining, crinkled green leaves and the well-rounded flower-clusters is always striking. These flowers, moreover, hang to the branches five or six weeks, and drop unbroken.

Standing out prominently on the open turf is a weeping hemlock of lighter and more rounded habit. Indeed, all its lines are models of curving grace. Like the Japan snow-ball in the one quality of picturesqueness, it needs much the same care in pruning to develop its full charms and to restrain it and adapt it to a city lot. The beautiful sprays and tendrils should be encouraged in their irregularities in order to obtain a characteristic and graceful form.

Another prominent feature of this part of the picture is a *Spirea prunifolia*, a deciduous plant intended to contrast with the evergreen hemlock. The curious small leaves and the set of the branches of this spirea are very characteristic and assort well in a group of varied shrubs. It is, moreover, the bridal-wreath spirea, bearing lovely white flowers in June. Through the summer, its shining, oval leaves contrast strikingly with other foliage; and late in fall, few plants present more beautiful colors.

Only two more plants await our admiration to complete the assemblage of more prominent shrubs and trees visible in the picture of this miniature lawn, and both of these are again Asiatic and one Chinese. The first, a tree-box, needs only to be mentioned to call up visions of stately gardens of the eighteenth century,—clipped yews and box-trees wrought into the similitude of strange beasts and other quaint devices in the old formal manner—a manner that accorded well in its time with buildings designed after Greek temples and with lawns where all was evident art and stately elegance. Lords and ladies paced between "pleached" hedges and there was in it all a certain harmony. But now in our modern world, art is demanding the presence of nature everywhere. Except in retired corners, we cannot properly practice the old formal manner, yet we may still employ the box-tree as satisfactorily as ever. Very many city lots show its value where the passage of years has left it healthy and flourishing. Probably nothing in the way of plants withstands injurious city influences better. Then,

moreover, it is an evergreen, an evergreen shrub with distinct conspicuous leaves and vertical lines of growth which accord well with the architecture of city houses. Its bright living green is also compact and so



WEeping GOLDEN JAPANESE CYPRESS. (*RETINOSPORA FILIFORMIS AUREA*.)

patient of pruning, as already noted, that its growth may be guided at will.

Another plant, a tamarisk (*Tamarisk indica*), grows close by the corner of the house. Its waving elegance forms a strong contrast with associated shrubs and serves to lighten the general effect of the place. Very distinct and exquisite also is the foliage of the tamarisk,—fine as fronds of some delicate tropical fern. The flowers come in late summer and early fall, fringing the foliage with drooping pink lace-work.

At a later date, two other striking plants have been added to the lawn with a view perhaps to replacing eventually some shrub grown old and unsightly. They are not visible in the picture, being as yet very small, but appear in two separate illustrations. They are both Japanese, but the first, the parasol pine, is perhaps the most extraordinary lawn plant of the curious Japanese flora. It is greatly prized in Japan and grows there to a considerable size, with shining whorls of strange-looking glossy foliage

disposed in thick masses. Perfectly hardy, it is likewise, by its dwarf nature, well adapted to small lawns during at least twenty years of its life. During the first three or four years, it hardly grows as many inches, and is always rich and unique in its appearance. As yet it is an extremely rare plant in America, where there scarcely exists a specimen over four feet high.

The Japanese cypress in the cut is a very rare variety, decidedly the rarest plant on this particular lawn; but it is also very beautiful with its thread-like masses of golden drooping foliage. It is dwarf and well fitted for small places, and has an advantage over the common golden Japanese cypress (*R. plumosa aurea*),

part of the house, and from sundry nooks peep out white snow-drops, yellow crocuses and the tiny bells of the lily-of-the-valley. To vary further the color of the green ivy turf, low-growing, richly colored herbaceous plants, like the creeping yellow-leaved moneywort, wander about at will. Purple asters, blue aquilegias and lovely day-lilies appear here and there on the outskirts. Everything com-



DESIGN FOR A LARGE SUBURBAN LOT.

in that it needs little pruning to retain compact shape.

Of all plants suited to the miniature lawn, few surpass in native charm the hardy herbaceous plants, many of them familiar wild flowers. On our miniature lawn, the less and less fashionable crudity called "ribbon planting" would be almost inappropriate, not to speak of the trouble of replanting such plants every year. All the richness of color in flower and leaf of bedding plants may be obtained in a more delicate and fitting way for small plots by the employment of hardy herbaceous plants and bulbs that flourish for years in the open ground.

Few other features of our city lawn remain to be mentioned. Star-shaped clematises creep over the borders of the ivy on the ground, as well as over the fence. Japan creepers cling to the stone-work of the lower

bines to make a very complete miniature lawn.

But such lawns will not care for themselves. They need thorough culture, and especially pruning, to adapt them to their confined location. Summer pruning is very important, particularly for the ivy, whose wandering tendrils need occasional training, as well as pinching. This care, however, is not irksome, for there is little to be done at a time; and, in any case, we doubt whether other adornments of home will afford equal pleasure with less expense.

II.—A COUNTRY LAWN.

LET us now give our attention briefly to another typical, but entirely different,

instance of lawn-planting, viz.: a country home of the commonly occurring dimensions of 100 feet wide by 200 feet long. Citizens



WEeping PINE (PINUS AVICENNAE).

going to their business daily, and possessed of moderate means, frequently occupy a place of this size in some neighboring village or suburb of the city. To employ a gardener by the year, on half an acre, would seem extravagant; yet gardeners are hardly to be had on other terms. Consequently, a few hints afforded by the description of an existing lawn will scarcely come amiss to many, who, if they realize how much adornment of this kind is possible for them, must be sorely puzzled to secure the fulfillment of their desires.

The place to which we refer is that of a neighbor, who a few years since purchased it, in a so-called improved state, and gradually has made it, from the crudeness and almost chaos of its former condition, a truly delightful spot. Originally, the lawn was covered promiscuously with maples, arbor vitæ, old fruit-trees, neglected-looking rose-bushes, and rows of rudely clipped shrubs. The new owner of the place changed all this by cutting down everything except a few trees along the fences, and two notable specimens, of which more hereafter. He then subsoil-plowed the lawn, spading only

such parts as the plow could not readily reach.

No greater fallacy exists than the idea that spading is better than plowing of an equal depth. No tilth can be better than that given by the plow, followed by frequent and continual applications of the harrow. Leveling with the spade can then be executed in the most perfect manner, and the finishing touch can be given by a light cross-plowing and harrowing. Seed should be always liberally applied; and, instead of the various lawn-grass mixtures, we believe in the use of simple red-top seed, together with a very little white clover; and when it is thus applied (during quiet hours of the day that it may fall evenly), two or three years should suffice to grow a thick, velvety turf. Weeds are the great enemies of good turf, and every lawn should be kept as free from these pests as a flower-garden. The employment of good artificial fertilizers greatly helps to secure permanent freedom from weeds, since foul seeds cannot very well lurk in them.

Good turf obtained, the walks were carefully laid out in long, graceful curves, with shallow grass edges, neatly trimmed. Every



WEeping NORWAY SPRUCE (ABIES EXCELSA INVERTA) AND DWARF PINE (PINUS STROBUS COMPACTA).

winter, fertilizers were applied to enrich the grass, and a perfect surface was always maintained throughout the season

by the use of a lawn-mower. The house, being on the north side of the lot, afforded abundant protection for choice plants, and secured the employment of large and effective masses of evergreens, as part of the same shelter. The masses of foliage, also, since they pertained to a larger place, needed less exact care in their disposal. Their appearance, likewise, having less individual attraction at a distance from the house and more mere picturesque effect, required less pruning and studied attention.

Among the trees that had been preserved from the general destruction that befell the old plantation, were two specially attractive specimens. It was really wonderful how they came to occupy the positions they did, and indeed, how they came to be on this lawn at all, for the other trees used were by no means choice or rare. These two specimens, on the other hand, were both choice and somewhat rare. One of them, the cut-leaved weeping birch, stood by the summer-house and hung graceful sprays above its rustic angle. Indeed, at this point in the picture, the bolder color effects of the lawn-planting seemed to culminate. Rising thirty feet above the summer-house, the white bark of the birch split into strange devices, and the delicate grayish green foliage made a fine effect against the masses of large Norway spruces near by.

The other noteworthy tree retained is a Nordman's fir, by some termed the king of evergreens. It stands by itself, equally removed from the clustered shrubbery of the outer boundary, and from the choice plants along the only footpath. After the cut-leaved birch, it is decidedly the most imposing and important tree upon the lawn,—a rich, dark mass of color on the green turf and near the light deciduous foliage. You will at once note how perfect the symmetry—perfect, even for a Nordman's fir. Growing as it does in a massive, stratified manner, with a blue silvery lining under the leaf, the compactness and symmetry add greatly to its beauty. And what a grand specimen it is—thirty feet high and without a flaw!

Two varieties of evergreens are grouped about or near the Nordman's fir. They are small, six to nine feet high, and were planted by the new owner some eight years before. Their arrangement has been made with the view of affording a measure in height for the larger trees as well as a complete and harmonious contrast of color. The most noteworthy of these is *Pinus ayacuhuite*, a rare Mexican pine of decided beauty, of which

we give an engraving. Although this pine comes from Mexico, it is generally hardy in the Northern states; it is the nearest approach to a weeping pine that we have if we except *Pinus excelsa*. The branches, indeed, do not droop, but the long pendent clusters of needles give a weeping appearance to the general effect of the tree. In the young plant of our illustration, the shape of *Pinus ayacuhuite* is decidedly pyramidal; but as it grows older, it assumes more of the usual spreading appearance of *Pinus excelsa*. No specimen, however, of which we know has yet attained large size, for it is comparatively a new plant and as yet little employed. *Pinus excelsa* has occasionally suffered from a peculiar disease,—but for beauty of color and form it is nearly equal to the *Pinus ayacuhuite*. We notice even now in youth that *Pinus ayacuhuite* has a more open appearance or branching than the Nordman's fir, against the shining dark masses of which its rich blue color stands out in beautiful relief. There is a slight resemblance between the outline of this specimen and that of the Nordman's fir, but not too much when accompanied by contrasting bluish-green color. The growth of this tree is moderate and easily restrained by pruning, to which it takes very kindly. To complete a harmonious and richly effective arrangement, three pyramidal arbor vites, at that time three or four feet high, were planted within two feet of each other, and about ten or twelve feet east of the Nordman's fir. Standing singly near the fir and pine, one plant of this arbor vite would have been almost too slender and insignificant; three specimens, growing together at the base and developing independent spire-like heads, give variety of form and sufficient size to bear a proper relation to the graces of the other trees. Their color too is light, lighter than that of either of the other trees, thus affording a complete contrast of hue as well as form. This arbor vite is thrifty in habit and perhaps hardier than any other of its race, and above all keeps its formal shape with little pruning. It is still an uncommon tree, and well deserves more attention.

It is a fortunate thing for the lawn that it occurred to some one to plant the Nordman's fir just where it stands, for it is the making of the place artistically considered. Color as well as form are here grouped harmoniously and yet boldly. The variety in height, the different shades of kindred color, the columnar, spreading or open, and the

massive conical forms, all combine into an instance of what we conceive to be good lawn-planting composition. A sense of coziness is suggested by the semi-detached lawn or croquet-ground of this part of the place,—features that are defined, as it were, by this very group. Further variety of detail is given to the scene by climbing honeysuckles and wistarias clustering about the rich, solid proportions of the rustic summer-house. Across the lawn, past the border of the croquet-ground, is a beautiful Japan Judas-tree; it is a lovely shrub, with early pink flowers and rich green leaves, and does not grow high enough to interfere with the sunset view. Across the path from this plant is a group of the rare and exquisite Japanese maples. Nearer the house, and still on the path, is a graceful weeping hemlock, already noticed as one of the choicest of evergreens. The common hemlock, in certain conditions of its growth, is unsurpassed for weeping grace. Imagine one of these naturally weeping specimens, fixed permanently by grafting at the best development of its pendulous habit, and you have the true weeping hemlock. It is indeed rare and difficult to propagate, yet it would, nevertheless, be brought into common use could people generally see its great beauty. Slow-growing and even dwarf, it is also delicate and graceful. It is always, moreover, surprising one with new and beautiful shapes. One peculiarity of this particular specimen consisted in the fact that it is low-grafted. Convention declares that weeping trees must be grafted high to secure the effective appearance of their pendulous form; but practical experience in America, on the other hand, teaches that the stems on which these weeping forms are uplifted tend to diseased and disfigured conditions under the stress of American suns and changes. The spreading forms of the low-grafted hemlock assume, moreover, a more natural grace.

Near the weeping hemlock, with perhaps a deciduous shrub or so between, are four very distinct dwarf evergreens, distinct and curious especially from the manner in which they are grouped. They consist of the weeping Norway spruce surrounded closely by three dwarf white pines. Norway spruces and white pines are always associated in our minds with large, massive forms, but here are white pines that in twenty years need scarcely reach four feet. The weeping Norway spruce, too, is dwarf, but in a very different way. The forms, moreover, are perfectly natural, in no way the result of pruning. And what curious plants they

are,—the one rounded and compact, with long, well-defined needles and softly blended colors of blue and green, and the other dark, grotesque, and erect!

A little farther along the border of the walk and near the turn leading to the front of the house, stands a rhododendron. This beautiful plant is specially effective at this point, as it not only varies the curve of the walk, but presents a delightful object in view of the bay-window, about which are Ghent azaleas, flowering deciduous shrubs, *spirea*, *thunbergii*, *prunifolia*, and other fine-leaved, beautiful flowering varieties.

It is not, indeed, an expensive lawn, having scarcely cost \$500 for all the plants; but there is something of everything hardy to be found on it. Blue and white wistarias form a cordon of bloom along the eaves of piazza and balcony, and honeysuckles, Virginia creepers, etc., fill a part of the space between the columns. The Japan creeper and the great purple or white flowering clematis creep about here and there. Young vigorous roses bloom in nooks of shrubbery. Violets peep out early in unexpected places, and familiar wild flowers lurk in favoring spots. There is no startling display of beds of flowers, any more than there is in woodland glades; but the plants seem at home. In front, along the road, is a wall of solid masonry, neatly capped with stone by the new owner, and covered with Japan creepers. Immediately within are purple beeches, rich and dark. A weeping beech stands in the corner where its expanding foliage has plenty of room, and at intervals are fine flowering shrubs of large size, like the Chinese magnolias. Along the path to the front door are planted choice dwarf deciduous shrubs. The outlines of shrubbery and trees have been made up in the ordinary way, with Norway spruces, white and Scotch pines, elms and maples, with such common large-growing shrubs as lilacs, philadelphuses, dogwoods, spireas and weigelas. The grouping of these ordinary shrubs and trees is naturally arranged, after that of attractive bits of outlying woodland.

The perfect keeping of the paths of this place is also noteworthy; but better still is the regard shown for the health and well-being of the plants. Contrary to the usual habit of people who have no gardener, the plants have not been treated according to the mere advice of others, but have been made to thrive in a peculiar way by a painstaking study of their individual wants.

MR. NEELUS PEELER'S CONDITIONS.

"And those that are fools, let them use their talents."—TWELFTH NIGHT.



"THAR'S SUCH A THING AS CALLS IN THIS WORLD."

CHAPTER I.

"CALLS! I tell you, Calls! Betsy Peeler, or Betsy Wiggins, whichever you mout like most to be called. Calls! Thar's such a thing as CALLS in this world. Do you hear me?"

"I hear you; you know what my name is, and of course know how to speak to me," quietly answered Mrs. Peeler, and went on with her sewing.

This brief dialogue occurred, very many times, in various places in the neighborhood of Dukesborough, once a lively little village in the state of Georgia. Outside of these dark sayings, which Mr. Neelus Peeler was wont to utter to his wife in moments of passion when she would be gently remonstrating about his inactivity, the world had no indications, for years upon years, of the eminence to which he was destined to rise.

Nobody had believed that Neelus Peeler, or anybody like him, would get Elizabeth (always called Betsy) Wiggins. But he did. The Wigginses were industrious and made a good living. The Peelers were—everything but these. But Betsy had fair complexion and a head of hair that hinted at

redness. Then she was tall. Neelus was a fraction below middle height, with black eyes and black hair. The latter, when he was young and a beau, was curly, but after his marriage, neglected, it seemed to be in knots. Betsy, from a child, had said that if ever she married at all it should be to a person of black hair and curly. The Wigginses, especially Sam, Betsy's bachelor brother, ten years her senior, were very modest persons, with few words. Neelus Peeler, as all his ancestors had been, was a great talker. We seem, all of us, to want what we have not ourselves, and what none of ours have. It hurt the old people, but it nearly broke Sam's heart, when Betsy, contrary to all expectation, showed a willingness to take Neelus Peeler. But they said that, not being match-makers, they shouldn't wish to be match-breakers; and so Neelus got his prize; and a prize she was, if he could have known it.

Neelus Peeler's life, like that of all the other Peelers, had been spent heretofore, rather in meditation than in action. Marriage even, and to a woman who hardly knew what the word idleness meant, did not seem to be likely to

change the proclivity of his mind; and it was not until after several months spent with her parents, and after some serious appeals from his wife, that he began to look around a little. Not for his sake, but for the sake of the Wigginses, whom everybody respected and liked, he began his career with a position as overseer upon a plantation, and continued in this business for several years, with little change, except in the mere matter of location.

But this business did not seem to suit him. He often said that he was a person that people didn't understand; and the older he grew, the deeper he became, to all appearance. His reputation as an overseer did not grow in the way his wife had fondly hoped. As for her, she did all she could to help it. Besides the work she did for her husband, herself, and their son Elijah, she rendered many services on the plantations of their several employers, in looking after the aged and sick, and very young children, and the poultry, and the calves, and such like. Mr. Peeler, on the other hand, would often be found, if in winter, on the leeward of a good, fat, blazing pine-stump, while the hands were at work; if in summer, in a fence-corner, under a persimmon or sassafras. In these situations, his meditations, whatever they were, were not directed to the mere cultivation of the ground. Indeed, they were sometimes so profound that—although it would grossly offend him to tell him so—he would seem to be fast asleep.

As I before hinted, habits like these induced frequent changes of location. In spite of the services of his devoted wife, an employer seldom kept him longer than a year. At Christmas they would pack up their little property, and move off in an ox-cart, and try again somewhere else. When, with suffused eyes, she would beg him to attend more closely to his business, if for no other sake, at least for 'Lijah's, oh, how furious he would get!

"Calls, I tell you! Thar's such things as calls in this world. Don't you hear me?"

Gradually they shifted further and further from the neighborhood, until finally they found themselves on a rented place on the edge of the wire-grass country, about fifty miles below Dukesborough. The folks at home, hearing of this change, although they had foreseen it long, were troubled. Sam seldom left home; for, being the mainstay of his parents, he had to see after all the business of their little farm. They made a plenty, and were never in debt; but they

could not afford to spend much, except for their own needs. Yet Sam, at Christmas, carried to his sister a wagon-load of good things,—hams, chickens, flour, potatoes, lard, etc. It did him good to do it; for he doted on his sister Betsy, though (as occasionally he would admit in confidence) he despised Neelus.

"Good gracious me! The good Lord have mercy on all of us! You don't tell me so, Betsy?" said Sam to his sister the next day after his arrival. He was getting ready to return; Mr. Peeler, taking leave, had ridden off.

"Fact. They've licensed him already," and, for the first time in her life, she blushed before her brother with shame.

Sam started to laugh, but, noticing the pain she felt, he restrained himself. He bade her good-bye, advised 'Lijah, now a big fellow, to be industrious and stand by his mother, and then drove on back home.

"Well, well, well!" he soliloquized many times on the way. "Neelus Peeler goin' to preachin'! Heered a call! He heered a call! I'm afraid he answered too soon, and when they were callin' somebody else. But I wondered what made him pray so powerful loud and strong last night. I might have knowed somethin' was goin' to bust. Wheneversomever men like him begin to holler that way in their family prayers, and get to talkin' about a Gallo-like generation, and the gald of bitterness, and the bounds of in-iquitty, and a-askin' the Almighty if He and everybody else don't know about their conditions, and all sich, they are goin' to try to be a preacher, or a exhorter, one or tother. But Neelus Peeler!" and Sam laughed aloud.

"Howsomebeever," he would continue, "Neelus have a mighty power of words; and he can have a mighty cryin' and pleadin' way when he wants to; and them wire-grass people, sich as I seen, might be satisfied with Neelus. And as he aint no manner of account to his family, he might jest as well go to preachin' as to stay at home and do nothin'." So joy go 'long with you, Neelus, in your new speres. Only I wish your son 'Lijah wasn't so much like you. Poor Betsy! Poor Betsy! But she shall never want bad, as long as I can raise a hand to work."

And sure enough, the news soon came up into the old settlement that the Rev. Neelus Peeler was a minister, and an acceptable minister, of the Gospel. For three or four years Mr. Peeler held forth in pul-

pits, in both stated and missionary labors. His previous thoughts and reflections had been so constant and so long continued that when he did begin at last, he was at least as good a preacher as he ever became afterward. This began to be remarked more and more frequently as the time elapsed. Having discovered that his forte lay in the pathetic, and that he was not as likely, as he at first believed, to do great things in other departments, he grew year by year more and more plaintive; his brow and eyes, and especially his mouth, assumed mournful shapes; the hymns he gave out were all of the melancholy kind, and the texteses (as he called them) were generally of wrath and threatenings. Yet, no matter what was the text, his own conditions (a word of everlasting use with him) were the main burden of his discourses, and he would often sing out:

"And oh, my brethering and my sisters, and do you know my conditions? And yes, you know 'em, and no, you don't; oh no, you don't; and if it wasn't for grace—oh, it's all grace—it's all grace! I'm thankful for grace, and oh—and oh—and ah—and oh——"

What was commonly understood as being meant by his conditions was that his wife, so far from cordially approving his undertaking the sacred ministry, was not even a member of the church; and further, that her worldly-minded brother, who sometimes even got drunk, lived on her parents, and was likely to eat up and drink up all they had.

At last the old people died, and died within a week of each other. The mother went first. Then the old man said he couldn't stand it.

"I can't stand it, Sammy. I've lived with her so long, and she have been such to me that I can't stand it to be without her."

Sam tried to remonstrate with his father: but sure enough he followed the sixth day afterward.

There was no will. Sam at once proposed to his sister that, as neither was able to purchase the other's interest, and as the estate could not conveniently be divided, they should own and occupy jointly. The death of her parents grieved Mrs. Peeler sorely; but she became thankful to be allowed to return to that peaceful home and to the society of the best of brothers. Mr. Peeler felt—well, there was no telling exactly how he did feel. He had had no fondness for his wife's parents and he positively disliked

Sam, though Sam had never spoken a harsh or a slighting word to him. He hardly knew why he disliked him, but he rather persuaded himself that it was because Sam was such an awful sinner; and that if it wasn't for Sam *he* might have begun preaching sooner and gotten on better with it after he did begin. He said to his brethren and his sisters, especially his sisters, that at last the poor old people were brought down with sorrow to their graves, and that now his own conditions were likely to become more afflicted than ever before.

"And don't the death of his poor father and mother have no bearin' upon the poor worldclean?" asked Sister Peacock, his favorite hostess whenever he found himself that far from home.

They were sitting at the supper-table. Brother Peacock was there too; but Sister Peacock was the main one, who, though a female,—often acknowledging, as she said she was willing to acknowledge, that she *was* a female,—was the strongest pillar of Harmony Church.

"And is the poor creeter yit on his Gallio-like way, a-keerin for none o' these things?"

"The gald of bitterness and the bounds of iniquity!" answered Mr. Peeler, as he sat and ate the biscuit and fried chicken and drank his coffee.

"They are his'n if ever they were anybody's; leastways I'm afeared so."

"Do he just lay about drunk and do nothin'?"

"Oh no," mildly and generously replied Mr. Peeler, "not as bad as that,—not quite as bad as that. He do work some, and he do keep sober sometimes for a while; but oh—it's his worldly heart, and his worldly ways, and his worldly behavior, and oh me!" And Mr. Peeler wiped his mouth with his cotton bandana, took another biscuit, passed his cup for more coffee, and meekly accepted another piece of chicken.

"It's to be hoped that when you git thar, and he can have some examples, he may yit turn, sinner, turn, and be made to ask hisself sometimes (as the hime says), 'Why will ye die?'"

"That's my hope; in that hope I mainly stands. With 'Lijay to help,—for that boy is a-growin' in grace, too, I humbly thinks,—I hopes to help him mend hisself in some of the biggest of his transgressions."

Sister Peacock became silent, out of respect for what she knew was the pain in the good man's heart, in thus having virtu-

ally to confess that he could count upon no co-operation in that blessed work on the part of his wife.

Oh, how he did ring that "gald" and those "bounds" that night at prayers! How he did mourn and weep for all the Gallio-like, nothin'-keerin, downward-rushin' sinners of a gainsayin' world!

"What always strikes me, Mr. Peacock," said his wife after rising from her knees,— "what always particular struck me in Brother Peeler is he's so able and strong in pra'r."

"Yes, and me too," answered Mr. Peacock, who never controverted anything Mrs. Peacock avowed.

Mr. Peeler sighed sweetly, turned toward Sister Peacock, elevated his upper lip, with his forefinger gently tapped first one eyetooth then the other, and then, passing it to and fro in the vacant space, said, with an extremely pious lip:

"Oh, Thithter Peacock, I with you could 'a' heerd me in them dayth and in them timeth before I loth thethe two of my front teeth."

The next morning after breakfast, when Mr. Peeler, being full up to his throat with ham and eggs and other good things, was about to leave, the hostess made one more fond remark.

"Well," said she, "I'm a female, and I acknowledge I *am* a female; of course I don't know about the laws, and about property, and all them things; but, if I am a female, I know justice is justice; and no such a worldlean as your wife's brother is ought to be allowed to have half o' that property, and specially after he lived so long with his parrents, and, in all prob'bil'ty, brought down thar gray ha'rs with sorrow to the grave."

This, with the good breakfast, sent Mr. Peeler off better satisfied with himself than he had ever been in all his life.

When he got home that night, he hinted to his wife what Sister Peacock had said.

"And what did you say to that?" she answered, turning and fastening her large blue eyes on him.

"Well, I didn't—ah—that is, I jest let Sister Peacock say her say, and—my horse was there hitched to the tree, and I was jest agoin' to start and, ah——"

"And you didn't say anything? You didn't tell her that you were ashamed to hear such a thing said about Sammy Wiggins? You didn't tell her that he was the best son that was a-living; that he was the

main support of his parents, and had been for twenty-five years; and that they loved him better than they loved anybody else; and that they ought to have done it; and were bound to do it? You didn't tell her that?"

"I thought I said,—leastways it was my desires to say, that my horse,—he were already hitched to the tree, and ——"

"You didn't tell her what I told you when I came from there the last time,—that while I was there I told father that, as Brother Sammy had taken care of him and mother so long, and had never done anything for himself, that he ought to make a will, and make over to Brother Sam more than half the property; and then the reason why he didn't do it? You didn't tell her that?"

"Betsy, haint I already said to you, or haint I already ans'ered that it was my desires to say to you that my horse he were hitch——"

Her face was crimson, and her beautiful eyes were yet enlarged; but it was from shame, not anger, as she caught him up in his speech.

"Oh, Mr. Peeler, Mr. Peeler! it was a pity that somebody wasn't there when that woman, who you tell me is the smartest and the piousest in all that Ohoopee region, was talking in that way; it's a pity that somebody wasn't there to tell her that when Neelus Peeler's wife, who had never helped her parents since she was a girl, but who had got from them every help that they could afford to give her,—when she tried to persuade her father in his old age that her brother, who had served him without wages all of his life, ought to be paid something for his services, and when her father asked Sammy about it, that Sammy, for the first time in his life, got mad with his father, and said that if such a paper was ever made, he would tear it up the very minute the breath was out of his body; that he wouldn't take one cent of the property, and wouldn't stay to see a man buried, even his own father, who would cut off his only daughter in such a way as that; but he would run away, and stay away from a place that he knew would be always haunted by bad spirits. Oh, it's a pity, a pity, there wasn't somebody there to tell that good and pious woman something about what sort of a man Neelus Peeler's—wife's—brother was!"

She turned away from him, went into her bedroom, wept deeply a little while, then

dried her eyes, came in, prepared supper, and called her husband and 'Lijah to it. No one coming in then would have suspected that anything unpleasant or uncommon had occurred.

CHAPTER II.

A SNUG little home they had there on Rocky Creek: three hundred acres of moderately good ground, a neat one-and-a-half story house, with piazza and two back shed-rooms, the farm well stocked with beasts and necessary implements. Then there were three negroes,—a man, his wife, and their son, a plow-boy,—family servants, well treated and devoted. Mrs. Peeler looked younger by many years, Sam thought, and so told her many times. The work went on well. Everybody worked except Mr. Peeler, and, I must grieve to say, 'Lijay, now some sixteen or seventeen years old. 'Lijay had inherited his father's repugnance to agricultural pursuits, yet not, apparently, his talents for public life. His father had his hopes about him. He was very young yet, he knew. He gave out that what he expected mainly of 'Lijay for the present was assistance in the reformation of his uncle Sam, and withdrawing him from the gald and the bounds by which he was held. As for himself, he circulated yet more widely than ever before, and among more distant fields. For somehow he had become rather worn in that wherein he had first labored. Even this was a good day's ride from his present home. Here there was left but one church for stated preaching; but the less of this sort he had, the more far and wide he traveled on what he called his missionary work, especially now that his services were never needed at home. Revivals and protracted meetings were what he liked best of all. These he would pursue throughout all the regions round about Buffalo, and Williamson's Swamp, and occasionally even to and beyond both the Ohoopees, Big and Little.

"Oh, a bunnance, a bunnance, Sister Peacock," he would say on his way back, while stopping for the night,—*"a bunnance of good preachin' to be done all around in thar and among them Ohoopees."*

"I sposen so," she would answer; "they tell me—that's been down thar—that they needs a bunnance o' light in them wasted and watery places."

"A bunnance, a bunnance. I try to lift up the gospel poles, and when my arm gives

out, Brother Lazenberry he takes hold of 'em, and when his'n gives out, I take hold ag'in, and, betwixt us, them poles is hilt up when me and Brother Lazenberry travels around thar together."

Sometimes to have heard his and Sister Peacock's talk, or his and 'Lijay's when he had gotten home again, one might have supposed that Mr. Peeler was just returned from toilsome and dangerous missionary labors in regions the most remote and benighted in all the earth.

And yet Mr. Peeler was not happy. He could but observe that he was not wearing well, as they used to say. He had rung, it seemed, every possible change of his afflicted conditions throughout a circle of at least fifty miles diameter in the wire-grass country, and yet the sympathies of the brethren and sisters everywhere seemed less tender and responsive. The sisters especially were gradually dropping their friendly quarrels about who should have him at their houses and feed him on biscuit and fried chicken. Something was the matter: what was it? He was conscious of no diminution of his powers. Somebody was to blame for it. Who was it? Sam Wiggins!

Old Sam was innocent of any intention to hinder Mr. Peeler's continued ascent. He worked every day of his life except Sundays for Mr. Peeler's family. True, sometimes on a Saturday, when he would return from Dukesborough, he might be a little "disguised," as they used to call it, with whisky. But this had never been a habit with him, and he was always ashamed of it. With the exception of this infirmity, he was one of the best characters in all the country. Then, he was a skillful farmer. They made a plenty. They could have sold poultry, eggs, and butter in town; but there was no one except 'Lijay to carry them; and even if his mother had desired him to do so—as she did not—'Lijay was not the boy for low work like that. And so they all, white folks and negroes, consumed them, or sent what was left to their poorer neighbors.

But this entire devotion of Sam to Mr. Peeler's family seemed to have a depressing influence upon Mr. Peeler's mind. The more his wife doted upon her brother, and the more the neighbors praised the dear old fellow, the more he grew to dislike him. The farther he went from home on a "preachin' tower," as he was wont to characterize his travels, the more he

mourned and wept in the pulpit, and the more he asked of his brethren and sisters if they knew his conditions, his afflicted conditions, and the more he counseled and exhorted his hearers, and took up the argument against himself, as it were, and contended that we must all have our trials, and our crosses, and must take 'em up and carry 'em along in a vainglorious and a gainsayin' world. Such complaints were never heard anywhere near home. Indeed, Mr. Peeler seldom had an opportunity of exercising himself in his line except in fields quite distant, and becoming more and more so from Dukesborough.

Yet Sam Wiggins would hear from time to time of some of the things his brother-in-law had said, and the folks would occasionally joke him about being such a sinner as to make Mr. Peeler shed tears over him.

"Oh yes, yes," Sam would say, "Neelus is a great weeper. But Neelus cries different from other folks. He cries with his jaws. There aint a bit of Neelus's cryin' that comes from anywhere lower than his jaws."

Sam felt at first no great resentment against Mr. Peeler; for though brave, and even resentful in the face of manifest and intended wrong, he regarded Mr. Peeler as a sort of weakling that one might commiserate, but not combat. But more than this, he felt that he ought to bear almost anything for the sake of his sister, than whom never sister was more fondly loved, admired, and doted upon. Occasionally he would feel a pang of keen indignation, but it was soon gone. Mr. Peeler thought he understood Sam; but he did not,—that is, not quite. He never had expected that Sam would hear of what he was wont to say of him on the Ohoopes, and had no notion that, even if it should reach him, he would ever seriously resent it. Not for a great deal would he have had Sam leave the place; for he wanted him for the double purpose of supporting his family and furnishing capital for his ministerial labors.

"You say the poor creetur brought his bottle with him last night, 'Lijay?" he asked one Sunday morning of his son.

"Yes, sir, and I taken it, I did, after he got to sleep, and I went out, and I poured the stuff on the ground, and put back the bottle on his table."

"That was right, my son. 'Lijay, you know I can't be with your poor old uncle much of the time. I has to go where the sperrit calls me. I'm a-dependin' on you to

try and to see, if you can't see how, for to rigulate him in his wand'rin' and wicked pro—mulgations, so to speak. You are my depennence, 'Lijay."

Oh, how 'Lijay laughed and how proud he was! Depend on him! Uncle Sammy was already a soberer man since *he* had been thar.

Sam missed the liquor in the bottle. 'He had left it for a morning's cooler-off. For the first time in all his life, he felt hurt with his sister, whom he suspected of removing it.

"Some things is best, Betsy," he soliloquized, as he looked at the empty bottle. "Some things is best, and some aint best."

But he never said a word to any person upon the subject, and soon ceased to feel any sense of injury.

'Lijay was a great talker. It was he who would relate to his father, on his return from his towers, the condition of the work in the field, and of matters generally. Mrs. Peeler had tried to get his father to continue the pains which she had taken to make something of him, before he had grown too big for her strength. In vain she would tell of his idleness, his long, big tales, and his general sauntering worthlessness. Sam urged her at last to stop. Her talk did no good. 'Lijay was young and foolish; nobody was perfect; let him get some age; he would have a lesson, after a while, that would learn him something; let him alone. That is what Sam told her, and she took his advice.

In spite of Mr. Peeler's entire neglect of all sublunary pursuits for his public work, both stated and missionary, his professional reputation kept on the wane. The country communities of those times were not very exacting, provided their preachers insisted upon being sure in their own minds of having been called, and provided that they led moderately pious lives, and kept good, sound doctrine. Mr. Peeler could not but be aware of some declension in his influence. His afflicted conditions had been worn and worn, until they seemed as if they were going to be threadbare, and that at no distant date. The main complaint was that, no matter what was the text, he preached the same—or pretty much the same—sermon, at all times and places.

"I'm nobody but a female, and I acknowledge it," said Mrs. Peacock one day, when her husband and another of the deacons were discussing at dinner Mr. Peeler's merits. She had been one of the last to give up. "And I've always looked upon Brother Peeler as a acceptable minister of the gos-

pel,—that is, considerin' his chances. But somehow Brother Peeler, he preach better at first than he preach at the present time, and he don't come out enough on doctring lately."

Ah!" answered Brother Bullard, "Sister Peacock, you hit the nail when you said that word; you hit the nail right spang on the head, jest as if you had 'a' had a hommer. A few more of them greens, Sister Peacock."

Sister Peacock helped to the greens, and wanted to fill Brother Bullard's plate with contributions from every dish at her end of the table.

"No, no; plenty—plenty," he remonstrated, just before it was beginning to run over; "plenty—plenty. But you jest as well 'a' had a hommer when you said that word."

"Brother Peeler is very good in a funil sermon," acknowledged Mrs. Peacock.

"That he is! Jabez Marshall, nor neither can Silas Mercer, beat him very fur thar."

"And then he's very able in pra'r!"

"Powerful!" said Mr. Bullard.

"But yit, Brother Bullard, we must have—we do want—we can't get along, *all* the time, without *some* doctring, if it's only of a Saturday meetin' like, or of a Conference day, with a little final perseverance, and not a bit of fallin' from grace, and — Well, you know, Brother Bullard, I never was nothin' but a female, and I was always willin' to acknowledge —"

But Brother Bullard made Sister Peacock hush up right there, underrating herself in that kind of style. They all agreed, even away down there, hard on the Ohoopees, that there were limits to human griefs and sympathies; and that even the saddest and most sympathetic of mankind liked—occasionally, at least—to be pointed to a more hopeful prospect, both of this present mortal, and the future eternal, life. And then, some doctring was actually needed sometimes. Sister Peacock might be a female; but she stoutly denied being a babe, to be fed on milk. The other sisters, following the lead of the great pillar of Harmony Church, took up this idea, and said they wanted something hard and solid, too; and the way they talked about Brother Peeler would have led one to suppose that Brother Peeler regarded all the women, in all the borders of Buffalo, Williamson's Swamp, and both Ohoopees, whatever their ages, as so many infants. The fact was, Mr. Peeler had to make a new strike. Sam Wiggins had im-

proved every way under the sweet influences of his sister. Mr. Peeler ought to be more cheerful. Although the last to see, he did see at last that, even if in humility, he must go himself, and lead his flocks to feed, in more pleasing pastures.

One day he returned from an uncommonly extended "tower," and looked cheerful. Old Sam suspected that he had made a fee of five dollars for marrying some couple; but Sam was mistaken. 'Lijay, and only 'Lijay, knew the cause. Oh, how he had praised 'Lijay and bragged about, and was so thankful for what he and 'Lijay were doing for the regulation of poor Sammy Wiggins!

"'Lijay," he said, "I believe I've jest found out the real true idee of preachin'. It's to take a big tex' and then *charge*. I done that on Little Hoopee last Sunday week. I took a big tex' and I charged; and I tell you, my son, everything flewed before me like ducks when Len Peek is arter 'em on Rudisill's mill-pond. I am goin' to fetch up that sermon here the first chance I git, and then, you listen."

Shortly afterward, when the pastor of Elim Church, not far distant, was somewhat ill, Mr. Peeler hinted a willingness to occupy his pulpit one Sunday morning. It was the best that could be done in the circumstances. Here was a large congregation. It was remarked that Mr. Peeler gave out a more cheerful hymn, and spoke a more hopeful prayer than usual. He took for his subject the triumphant entry of our Lord into Jerusalem. He apologized for taking so vast a subject for his text; but on such a subject as this, veerses ought to be no object. I could not dwell (without the appearance of levity) as he did, upon the wildness of colts in general, and mule-colts in particular; on the temerity of an unpracticed rider undertaking to travel on one of the latter for the first time (in all human probability without any saddle, and a mere rope for a bridle) into a great city, and among vast noisy multitudes. The climax was in ascribing to these multitudes the motives for their concourse and their clamors, and their strewing branches in the way. By the time that he got to this part of his subject, his passion, which had been working from the beginning, seemed to have gotten beyond all bounds, and he screamed as he denounced that onbelievin' and Gallio-like people. And then his audience was stupefied with amazement as he declared and labored to prove that the intention of these

clamoring crowds was to "skeer" that colt—that young colt—that young mule-colt—that young onbroke mule-colt—and drive him to do things that were too awful to contemplate.

At this cap of the climax, Mr. Peeler, overcome by his feelings, sank down in the rear of the pulpit. The congregation was at a loss what to think. The young men smiled, and looked across at the young girls; the young girls smiled in turn, and looked at their mothers; the answering mothers puckered their faces and looked at the old men, and the old men frowned upon one another with terrible solemnity for a moment, and then looked interrogatively up to the pulpit. But the pastor apparently had been growing worse and worse for the last three-quarters of an hour, and sank deeper and deeper, until he was no longer to be seen. After several moments' silence, he rose feebly, complained of being extremely ill, gave out a hymn, prayed a dejected prayer, and dismissed the congregation.

CHAPTER III.

It was very soon ascertained that the pastor's views on the late question in theological science were not at all in accord with Mr. Peeler's, and so Neelus had to take his mule back across the Ohoopees, where he had been foaled. But how he did grow to dislike Sam Wiggins! Sam Wiggins did it all; and once more he returned, in his discourses and prayers, and conversation over chicken and biscuit, to his afflicted conditions. A little freshened by temporary rest from work upon one long-continued line, and resolving, if possible, to recover the ground he had lost, he strove to dig down to the very roots of human sympathy, drag it forth, and press out its last tear.

Meanwhile, Sam quietly pursued his humble way, working every week-day all day long for Mr. Peeler and his family, and when the night came, sitting by his sister, watching her knitting, rolling her balls of yarn, reeling her hanks of cotton and wool, and occasionally alluding fondly to the two old people now lying in the garden. When bed-time came, he lit his candle, went to his bedroom, and slept the sleep of the upright, the industrious, and the weary. As he used to say to several friends, but always in the strictest confidence, the old fellow had grown a little tired of Neelus Peeler's ever-

lasting preachin' and prayin' and talkin' about him, and he was sorely concerned sometimes to know what he ought to do. But for his affection for his sister, he sometimes felt that he would like to give Mr. Peeler a good shaking, and then go away and leave the place forever. Between this affection on the one hand and his growing resentment on the other, his simple, guileless heart had many a conflict. In the impossibility of real, his mind indulged itself in imaginary, avengement. Curiously enough, his ruminations on one occasion took the direction of art. The hawk had been unusually troublesome of late to the barnyard. Sam, having no time to hunt so cunning a thief, determined to make a scare-crow, intended to represent a man with a gun in his hand making ready to fire. Although with quite limited knowledge of the principles of art, it occurred to him to make this figure resemble Mr. Peeler. With some old, worn-out clothes, and other necessary things, he made his man, set him up, and contemplated him.

"Good! I had no idea I could do it so well. You are ugly enough, Neelus."

Yet, in fixing the attitude of the arms, he had some difficulty. After several efforts he sat down and pondered.

"It's no use; it wouldn't fool a jay-bird or a joree, let alone a hawk. They'd know you well enough, but they wouldn't know the gun."

Rising again, and essaying to adjust the arms to the intentions of the hunter, a new idea seized him suddenly.

"That's it, that's it! Instid of making you a-shootin' at 'em, I'll make you a-preachin' at 'em. Ef I can git that idee in 'em, they leaves these parts certain and sure."

Suiting his actions to his words, he took away the gun and stretched out the arms.

"I wonder I didn't think of it before. All you want now, Neelus, is a *voice*."

This unbloody revenge went far to satisfy his sense of injustice. He grew to think this likeness quite striking, and every time he passed within view of it, smiled with satisfaction. Many a talk he had with this preacher.

"How's your conditions this morning, Mr. Peeler? Pretty good? Ah! Jest passable, eh? I think you mout be satisfied with 'em,—the rest of us a-workin' and you a-roamin' and a-roarin' 'round genilly."

Sometimes he would seriously remon-

strate with him for his ingratitude, his non-appreciation of his wife, his neglect of his son; but he would soon lapse into a pleasant vein, and, regarding him with pleased attention, seem to lose all resentment to the man in the satisfaction with his own hitherto unknown and unsuspected genius. These colloquies were usually concluded with the ejaculatory refrain: "All you wants is a voice. What *would* you be if you only had a VOICE!"

The only uneasiness he felt was from an occasional apprehension that his sister might happen to notice it sometime, and, being struck by the fac-simile of her husband, have her feelings hurt. But she seldom went out of the yard in that direction. However, to make sure, in order to avoid detection, he placed the figure in the plowed ground beyond the fence, artfully averted his face from the lot, and, as it were, disposed his audience down toward the meadow.

About this time the regular battalion muster came on. This was the grand occasion of the year, not even excepting the Fourth of July. Men that never got drunk during the whole year sometimes had to give out on this day, and nothing, or next to nothing, was said about it. The drum and fife were too inspiring, the memories of the brave deeds of their fathers too fresh and exulting, to allow even temperance-society people to keep entirely sober. By night, after such a day, the battalion, taken as a body, believed itself competent to manage the choicest red-coat brigade that might be mustered.

Sam Wiggins, in obedience to the orders of the captain of his militia district, had to attend. 'Lijay suggested to his father that he ('Lijay) ought to go along with his uncle Sammy, and try to keep him sober. He had very nearly made an entirely sober man out of him, anyhow; but to-morrow would be a great strain. The idea struck Mr. Peeler as wise and opportune. Sam smiled, but said nothing at the breakfast-table, and his sister looked surprised, but also said nothing, when Mr. Peeler told 'Lijay he might have Jim, the mule, to ride to the muster.

During the greater part of that day, Mr. Peeler sat in his piazza and ruminated. He hardly knew what he thought. Sam had been temperate so long that Mr. Peeler now had inadequate cause of crying, even with his jaws. If the old fellow should happen to make a big spree of it to-day, a little fuel would be added to the flame of

his pathos, which he confessed had been burning low of late. He hardly knew how he felt. Toward evening, his wife brought out her sewing and sat also in the piazza, silent and thoughtful. At length Mr. Peeler spoke.

"It appears like Sammy is sorter late in comin' from the muster."

"Yes," answered his wife, "it's time they were home."

"They?" ejaculated Mr. Peeler. "They? 'Lijay would have been home long ago, if it hadn't been for your brother. It's him that's been a-keepin' 'Lijay back, you may be sure o' that. Pity—pity—pit-tee," continued he, lengthening his words as if he would reduce to measure and sing his commiseration,—“pity that a minister of the gospel, the blessed gospel, should have to have his mind all tore up by sich a case, and to have his own son a-follerin' of *his* own uncle, and to take keer of him, and to watch him, and to fetch him home from a wicked muster of a wicked battalion in a wicked town; and—ahem!—a man's own wife not seemin' to keer for sich things, and her own brother at that, and a drawback, as it were, and a backhold, and a ———”

"Mr. Peeler, what is all such talk about, and what is it worth? You know I do care for such things (or ought to know it) as much as you do; but not like you do. I care for them for Sammy's sake; for he is the best man in this world, in spite of that one fault, which he is very seldom guilty of, and which, somehow, you make ten—yes, a thousand—times worse than it is. You talk about his being a drawback. Why, if he was to go away from here, as I know he feels like doing sometimes, he would be missed—I can tell you that."

"Oh, Betsy, I shouldn't wish, that is, I shouldn't desires that Sammy should go away and depart from us, and, as it were ———"

"No; I think not. But I can tell you farther, that if you did let 'Lijay go to the muster for the reason you say you did, and if Sammy finds out that that was the reason, and if such as that is to be kept going much longer, Sammy will leave; and there wont be any power on this earth that can stop him. Mr. Peeler, I wonder you did that. I'm sorry you did that."

Mr. Peeler, with all his powers, stood in some awe of both his wife and Sam.

"Why, Betsy, my dear, I—I—I—thought that was the very best thing,—leastways, it was my desires ———"

"The best thing!" she replied, contemptuously, but quietly, and, as always, without anger; "the best thing with an honest man to send a boy, and a boy like 'Lijay, after him to watch him?—his own sister's child; and one too that, here I tell his father, has been watching and hounding his uncle too long already, and is not a fit person to be put to reform his uncle, or any one else that I happen to know. 'Lijay had better staid home."

"Well," said Mr. Peeler apologetically for his wife's weakness of judgment. "Sich is the female mind, and sich it will a-most always stick to its own brothers, no matter how Gallio-like,—and even against their own chil'.—But yonder they come—and—yes—jes as I expected."

There they did come slowly up the lane, the horse and the mule; but only the latter's rider was erect. Sam's horse was apparently bringing a heavy load.

"Now, aint that a sight for a minister of the gospel to have to see a-comin' to his gate—and the poor bewilderin' creeter not bein' able to set up, nor hold his head up, but has to lay down on the dumb animal's neck, and 'Lijay, he havin' to hold on to his leg. I leaves the sight." And Mr. Peeler withdrew into the back-yard.

Mrs. Peeler put down her sewing and looked anxiously and painfully at the comers as they slowly approached. Never before had Sammy come home, or been known to be, in such ill condition. She rose to her feet, and looked more and more eagerly as they neared the gate. Just as they reached it, she uttered a cry and ran to them. The burden was taken from the horse, carried somehow to the house, and laid upon the floor in the piazza. Mrs. Peeler went to the back-door and called her husband.

"Have the poor creeter been put away, Betsy?"

"I tell you to come in. You are wanted here right away."

"Well, my skeerts is cle'r," and, slowly entering, he walked through the house on toward the piazza. No sooner did he get there, than he fell backward into a chair. There stood Sam Wiggins, leaning against a post, wiping with his handkerchief the sweat from his face, while prostrate, with rolling eyes and grinning mouth lay—'Lijay! The boy, seeing his father, muttered some words about "having fotch—ole fel—safe; but mons-trouble,"—and then gave a loud, dismal cheer for "Gen'l Wash'n."

Mr. Peeler winked his eyes repeatedly

while looking alternately up at Sam and down at 'Lijay, as if he must be mistaken as to their relative situations. He then looked at his wife, who stood still, silent, pale as the dead."

"I don't," he began, at length; "I don't, that is,"—rubbing his eyes violently, and winkin' more and more; "aint they—aint they some misunderstandin'—or some mis—ta—take—or some mis—"

"You see for yourself," said Sam; "or, could see, if you would open your eyes and quit winkin' 'em so much, and would look down thar on the floor. You see it aint ME."

"I never should a bl—b'lieved it."

"You shouldn't. Well, I always knowed it was a-comin'; only it didn't come quite as soon as I spected; but it's come soon enough."

He lifted the boy, carried him into his chamber and laid him on the bed. 'Lijay was inclined to remonstrate, still desiring to continue faithful to his trust, and look after his poor old uncle Sammy. Being repeatedly assured that Uncle Sammy was all right, at last he became reconciled, and immediately dropped to sleep. His father looked on utterly bewildered. He curiously contemplated 'Lijay, seeming to regard him as something that was dead, and to be trying to recall to himself whether or not he had ever known it while it was alive. He followed Sam back to the piazza, as if he had been charmed. Sam paid no attention to him; but, taking his hat, he walked past the stable, climbed the fence, arrived at the stump on which the imaginary Mr. Peeler, now much worn and wilted by long service in wind and weather, yet held out his arms and poured forth upon his conditions to a sorrowful and sin-stricken world.

"And now, sir, before I go from you for good, I'm goin' to do the best I can for you, and give you some conditions, as you call 'em, that will do to talk about when I'm gone. It's the best I can do, situated as I am, and situated as you are, and situated—well, never mind about the balance."

He seized him by the throat, wrenched him from his elevated position, and, striding along, the feet of the wretched man dragging beneath that powerful grasp, his arms yet extended, as if yet appealing for sympathy and succor, the avenger pressed ruthlessly on into the remotest depths of a small pine thicket that had grown up around a bend of the spring-branch. It was never definitely known what became of the victim; but from fragments of felt, feathers, cotton,

shoe-leather, and other articles of human apparel, afterward seen upon the margin of the stream, it was suspected that he had been drowned.

CHAPTER IV.

SAM walked slowly back, lingering a minute or so at the spring, at the cow-pen gap, at the stable, at the crib, at the yard gate (where he exchanged the saddles of the horse and mule), and even at the bottom of the piazza-steps. Mr. Peeler and his wife were sitting there, and both watched him closely as he dragged his feet up heavily. Without daring to look at his sister, he turned to Mr. Peeler and, standing, said:

"And now, Neelus Peeler, it's about time you and me had some understandin'."

"A understandin'—Sammy, a—under—standin'?" Mr. Peeler's eyes snapped, and he looked as if he had been under the impression that the most satisfactory understanding had been arrived at between him and his brother-in-law long ago.

"Yes, sir," answered Sam, making his attitudes so as, if possible, to have his sister in the rear while he had Mr. Peeler in front.

"Yes, sir, a understandin'. I've stood your preachin' about me (if you mout call it preachin'), and I've stood your talkin' about me, and what's more, I've stood your doggin' me about with 'Lijay about as long as anybody could be expected to stand 'em. But now, Neelus, we got to part. It's mighty easy to make a settlement. I want nothin' but Bob, and my saddle and bridle, and thar they stand hitched at the gate. Betsy may have the rest."

He turned and looked toward his sister.

"It's sorter hard to part from her, and —"

Before he could utter another word, she gave a piercing scream and fell upon his neck.

"No, no, no!" she cried. "And what will become of me without the only one in this world who loves and cares anything for me?"

And then she let him go, and stood with her left hand resting upon his shoulder. Raising her right and extending it toward her husband, she said:

"Neelus Peeler!"

Mr. Peeler could not sit in that chair; so he got up and backed against the wall.

"Yes, sir, stand up. Eighteen years ago you stood in that room and promised to love, and honor, and protect the girl that stood by your side. And while you were

making these promises, this man here was standing in his mother's room, because he couldn't bear to hear the words spoke that were to part him from his sister. I'm not going to reproach you for anything you've done to me, nor for anything you've neglected to do for me and the poor boy that lies in there on the bed. But this man here, who has been for over thirty years working and toiling for father and mother and me and has got nothing for it except his food and his clothes,—do you think I'm going to suffer you to drive him away from this place, and keep me here after he is gone? I call heaven to witness, Mr. Peeler, that if either my brother or I must leave this place, it shall be *me*. The day he leaves, I leave too;—but not to go along with him, and be a burden to him any longer. There's been enough of that, God knows. But when he takes his direction, I will take the other, and work my way, or beg my way from house to house."

Her long hair became disengaged from its comb, and fell streaming over her neck, and face, and shoulders. She pushed it back from her eyes, and then again threw her arms around her brother's neck. Mr. Peeler tried to speak; but, for the first time in his life, the words stuck in his throat. He scraped himself slowly against the wall until he reached the door, then backed into the house, and got out of sight.

Poor old Sam! He feebly strove to get loose from his sister; but all his great strength seemed to have departed from him. He reached out toward the post, got hold of it at last, laid his head against it, slowly sank down upon the bench beside it, and wept aloud. He had not had the slightest idea of giving up in this way; but the arm of that sister around him pressed upon his great, big, old heart, and he could not see clearly how they were to part. There they sat a long, long time. Day went down, and the moon arose, and yet there they sat. Sam tried to argue. He had thought that he had a good case; but she headed him at every corner, and it appeared more and more that instead of a good case he had no case at all.

"Oh no, no," she said softly. "No, no. Here was where you and I played together. You've been here ever since I went away. Perhaps I may not have done as well as some others; but God knows what is best. And now I am back again in the same old home: no longer a child, but needing as much as a child, and more than ever I have needed before, the love and —"

"But Be-be-bets—" Sam began.

"No, no," said his sister gently, putting her hand upon his lips. "No, no, I am better off than you think, in spite of some few troubles which I am thankful are no worse. You can't put yourself in my place, my dear old Sammy. I am happier than you know of. And I am going to be happier than I have ever been in my married life. I am sure of it. Come with me."

They rose, and she led him into the garden, down behind the rose-trees, under the cedars, and they sat down upon the rude bench. They were not persons for much sentiment, these two, brother and sister, even as they sat at midnight by the graves of their parents; yet they came away shortly afterward, if not with fonder mutual affection, with more cheerful hopes for all the good to which they humbly aspired.

From that night things grew better and better. Mr. Neelus Peeler retired from public life; not abruptly, nor, as it was believed, from any definite predeterminate resolution. It seemed rather as if the work that had been allotted to him in the vineyard was finished sooner than had been expected. His forte having been mainly, if not entirely, in the pathetic, and it now being universally recognized that, in his domestic relations, he had every thing to be thankful for, except in the matter of his own son (and he not so old as to be incapable of amendment), Mr. Peeler necessarily subsided into private life.

About a year afterward, a girl baby was born. Mrs. Peeler said that Sammy

should name it. To this proposition her husband made no objection; for now in Mr. Peeler's eyes Sam Wiggins had become, not only respectable, but great. Sam answered that if they left it to him, they ought to know that he should name the child Nancy. And then his sister, as she lay upon her bed, lifted her arms, put them around his neck, pulled him down, and hugged him until the old fellow was ashamed of himself. For Nancy was the name of their mother.

'Lijay, now having different guides, made some improvement. Before he was fully grown, Sam succeeded in what he frequently (but always confidentially) declared was his best hope for 'Lijay, namely, in marrying him off; or rather, as he was no match-maker, nor match-breaker, he let 'Lijay marry himself off; and notwithstanding the frequency with which such a thing occurs, everybody wondered at the luck that 'Lijay had.

For the rest of his life, Mr. Peeler submitted with a melancholy resignation to be supported by his brother-in-law and wife. Of course he could not feel as if he ought to be entirely idle. Sam kept him in powder and shot, in fish-hooks and lines; and it was somewhat touching, once in a while, to observe the meek satisfaction with which he would contemplate a broiled squirrel or a pan of horny-heads, that through his labors had been brought to the breakfast-table.

CHAPTER V.

AND oh, how little Nancy did grow!

SUMMER AND WINTER.

IN the mellow month of June
When the tawny thrushes sing,
And the yellow cowslips spring
From the meadows by the brooks,
When in dusky forest nooks,
Elfin huntsmen wind the horn,
And the clover-scented morn
Ripens into cloudless noon,—
Then I love to lie alone
In the grass on some cool hill,
While the meadow-larks all shrill
"Life is music." Care and pain
Fare but ill in Summer's reign.

When the hills are wrapped in sheets,
When the snow whirls on the leas,
And the icy-fingered trees
Sparkle in the moon's cold light,
When the clouds in the long night
Weave a pall for the dead year,
And the keen wind hurls its spear
Right at every one it meets,—
Then my heart is never sad,
For I think of breezy Spring,
And the joys that it will bring,—
Of the robins on the lawns
Piping in the dewy dawns.

PIERCING THE AMERICAN ISTHMUS.

WHERE shall be located and how planned the long-proposed ship-canal across the American Isthmus? This is the knotty question Ferdinand de Lesseps has prepared for an international congress of engineers, which assembles in Paris, on his invitation, as this paper comes from the press. The times and the auspices seem favorable to the project, which, through the action of the congress may reach a practical beginning. But since there will be two strong, opposing parties in the congress, the one favoring a canal carried over the Cordilleras, by means of locks, and the other, a canal piercing the mountain barrier, by means of a ship tunnel of unprecedented proportions, long and animated discussions must needs precede a satisfactory conclusion. The engineers and the capitalists are nearly agreed, however, that the canal is wanted and would be worth the hundred or perhaps hundred and fifty millions of dollars it will cost. Whatever this audacious century has thought worth its while to do, it has in the main done, and several times has "rectified the frontiers" of human possibility. It is no credit to the Pharaohs, with the pyramids of their ancestors in view, that they projected a canal across the Isthmus of Suez and succeeded in scooping out a shallow channel,—capable perhaps of floating a row-boat, had it not been buried, plans, hopes and all, under the shifting sands, leaving it to be unearthed and completed, in grand proportions, in our time by Frenchmen, who have ever been an affront to the accepted order of things, and in the pride of their new creations even scarcely regret having produced neither Shakspeare nor "Pinafore." The century still has twenty-one years in which to popularize flying among human bipeds and to build the interoceanic canal. But flying is not yet indispensable to human happiness, while nothing short of the Isthmus canal can fittingly crown the wonderful engineering achievements of the century. It is a scheme that appeals both to the practical sense and the imagination; it has long been the dream of the most eminent engineers, statesmen and economists; and perhaps even Balboa, planting his colony on the American continent, in 1510, on the Atlantic shore of the Isthmus, and, advancing one day to the mountains concealing the un-

known west, may have vaguely entertained the project

"— when with eagle eyes
He stared at the Pacific, and all his men
Looked at each other with a wild surmise—
Silent upon a peak in Darien." *

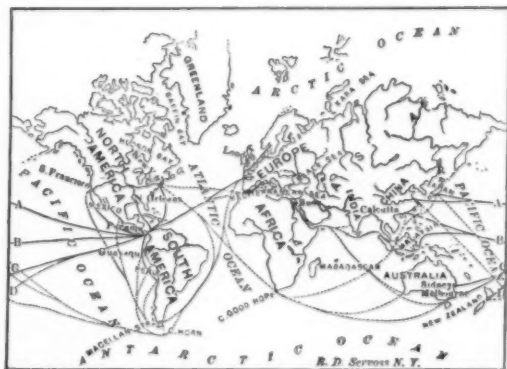
Within a few years the science of making geography to order has been remarkably developed. Holland almost set the fashion by giving Haarlem Lake up to agriculture, and since then has constructed a ship-canal, under great engineering difficulties, from Amsterdam Harbor direct to the German Ocean, making the Dutch metropolis independent of the circuitous and difficult course through the Zuyder Zee. De Lesseps comes next with his Suez Canal, triumphantly completed in the face of political opposition and in defiance of obstacles before regarded as practically insurmountable. Most important of all for the Darien project, the Suez Canal has proven a remarkable financial success, though it cost ninety-nine millions, about twice the amount first estimated. After it was opened in 1869, shares whose par value was 500 francs dropped to between 200 and 300 francs, while ten years afterward they are quoted between 700 and 800 francs. This canal shortens the voyage from England to India by 9,000 miles, yet the fact that British Oriental trade has been injured by it to the advantage of the great commercial cities of the Mediterranean testifies to the foresight of Lord Palmerston when he opposed its construction. The Darien project, on the contrary, met with his approval, and to-day appears to be the only expedient which would enable England to compete with France, Italy, Austria and Constantinople for the future Oriental trade of Northern Europe. The Mont Cenis and Hoosac tunnels demonstrate that man may safely drill his way through the rocky foundations of great mountain chains, and to this conclusion, the St. Gothard tunnel, moving with unexpected rapidity to completion, adds confirmation. Tunnels are soberly being planned to pierce the Alps under the Simplon Pass and to admit a railway under the English Channel. De Lesseps is maturing his scheme for flooding

* Keats, in ascribing the "eagle eyes" to Cortez, wrote better poetry than history.

the Algerian desert, confident that a vast inland sea once existed there and that it can be restored by cutting a canal through the sand-barrier of the coast, thus adding fertility and internal water communication to the French possessions in Africa. General Türr, president of the *Société Civile Internationale du Canal Interocéanique par l'Isthme du Darien*,—which holds a concession of rights in the Darien Isthmus for canal purposes and expects to be the nucleus of a new construction company,—is also interested in a project to connect the Adriatic and the Danube by a canal of ordinary capacity. The advisability has also been considered of a ship-canal across the Malayan peninsula,—the long narrow finger of land extending south from Siam to the Straits of Malacca. Such a canal, connecting the Bay of Bengal with the Gulf of Siam, would subtract 1,175 miles from the voyage between India and China. With this and the Darien project successfully ex-

Kelley, it is seen that the canal would make a saving in distance, from New York to San Francisco, of 14,000 miles; to Shanghai, 11,600 miles; to Canton, 10,900 miles; and to Calcutta, 9,600 miles. English commerce would be benefited by about the same saving in distance over the present Cape Horn route. Based on this saving of distance and the relative saving of time, and on the values of ships and cargoes that would have taken the canal route in 1856 and 1857, is the estimate that the Darien Canal, in reduced insurance, interest on cargoes, wear and tear of ships, freight money, wages, provisions, crews, etc., would produce an annual saving in money to the trade of the United States of \$35,995,930; to the trade of England, \$9,950,348; to the trade of France, \$2,185,930; or a total saving of about forty-eight millions of dollars, showing that the saving to commerce would pay for the canal in two or three, or at the outside four, years. The

tonnage which would have sought the canal in 1867-69 had fallen off slightly from the tonnage of 1857, which was 3,094,070 tons. A toll of \$2.50 per ton would have realized \$7,735,175 to the canal company. Add to this a charge of ten dollars per head on say 100,000 passengers, and it is roughly estimated that the receipts of the canal for the first year would be \$8,735,175, equal to eight and one-half per cent. on the cost of the canal if it were one hundred millions. But if the canal were to cost two hundred millions, there would still be, on this basis, an immediate return of four per cent., with the prospect of a rapid increase of the tonnage seeking the canal, as at



PLANISPHERE BY LIEUTENANT WYSE, SHOWING HOW SEA VOYAGES WOULD BE SHORTENED BY THE ISTHMUS CANAL. [THE DARK LINES INDICATE PROPOSED ROUTES; THE DOTTED LINES, PRESENT ROUTES.]

ecuted, a voyage around the world could be made, also *via* Suez, without crossing to the south of the equator, keeping, at the same time, between the eighth and thirty-seventh parallels. Unlike these other already successful or proposed engineering schemes, the Darien Canal will lie in a climate the most unfavorable to the health of the laborers employed, and where tides and floods and a long season of copious rain-falls place new and serious difficulties in the way of mountain tunneling, or the construction and maintenance of ship-locks of unprecedented size. But the reward of success will be proportionate to the difficulties and the cost. From computations made by Frederick M.

Suez. Capitalists see that, with the greater share of the commerce of the world necessarily paying tribute to the canal, since it would be without a competing rival, it would be one of the best paying investments the world now offers, even at a cost of two hundred millions. While greatly benefiting Europe, it would place America incontestably in the center of the world's commerce; and, as a writer in the "Edinburgh Review" once said, the success of the scheme would mark "the mightiest event in favor of the peaceful intercourse of nations which the physical circumstances of the globe present to the enterprise of men."

The one circumstance in the project which

most favors its at least being undertaken, is the fascination it has always exercised over intelligent and enterprising minds. Practical statesmen and hard-headed financiers have won back the glow of youthful enthusiasm in contemplating the scheme. Men have spent thousands of dollars in their zeal to carry forward the idea, a hope of reward usually being mingled with their thirst for honorable renown. A small library has been written on the subject, in support of the general scheme, or advocating or attacking particular routes and plans. American engineers, the most prominent of them officers of the army and navy, have made the most important scientific contributions to the project. The French, through the recent explorations of Lieutenant Lucien N. B. Wyse, of the French navy, assume the second rank as explorers, and now come to the front as promoters. Englishmen have made important explorations, and have always given encouragement to the enterprise.

It is a singular fact that Columbus, in a direct westerly search for a route to the Indies, happened nearly upon the narrowest strip of land barring his way to the object of his ambition. And on this barrier was made almost the first American settlement, and twenty-three years later (1532), these pioneer Spaniards established a line of communication with the Pacific coast, on the ground that to-day supports the sleepers of the Panama Railway. By this time Magellan had already discovered Cape Horn (1520) in his successful effort to turn the flank of the Isthmus, while Vasco da Gama, seeking to overcome a similar obstacle to eastern commerce, —the Isthmus of Suez,—had passed around the Cape of Good Hope; and it was the dream of a north-west passage that led Sir John Franklin to his fate in Arctic seas. Who can doubt that the same powerful incentive which inspired these voyages of discovery will result in cutting a channel through the Isthmus? At an early day the Spaniards had hopes of being able to connect the harbors on both sides of the Isthmus by means of a short canal as a connecting link between the head-waters of the numerous rivers emptying into these harbors. But when gold mines were discovered in Darien, to screen them as much as possible from the rapacious adventurers of other nations, Philip II. ordered all surveys and maps under lock and key. A century later, the English and French buccaneers pillaged Mexico and Central America, and, for a time, made Spanish possession of the Isthmus little more

than a name. But that these early Spaniards had wonderful engineering resources is proven by the Mexican Desague, a vast aperture two miles long, 300 feet wide, and 100 and 200 feet deep, which, two or three hundred years ago, was cut through the mountain range bounding the Mexican plain on the north-west, in order, it is supposed, to permit the escape of inundating floods. Of this Humboldt says: "In its actual state it is undoubtedly one of the most gigantic hydraulic operations ever executed by man." Malte Brun, in his classification, mentions nineteen distinct proposed canal routes, and French exploration has since added another. Humboldt mentions that about 1771 attention was drawn to the Tehuantepec route, by the discovery in the port of San Juan de Ulloa that cannon cast at Manilla had been transported across that isthmus *via* the rivers Chimalopa and Coatzaacoalcos. In 1843, M. Garella made a survey for a route near the present line of the Panama Railway, his plan requiring 35 locks and a tunnel over three miles long. The summit on the railway line is only 286 feet high, being perhaps the lowest summit on the American continent, and seemingly making a through-cut on this line not impossible; but other disadvantages weigh heavily against this favorable circumstance.

A new era of exploration began about the year 1850, stimulated mainly by the writings of Humboldt on this region, and his belief in the use and possibility of a ship-canal. Of course the discovery of gold in California gave the Isthmus prominence once more as a commercial nuisance. Since the appearance of Humboldt's book on Central America, the most prominent figure, among Americans, in pushing forward the enterprise has been a private New-York gentleman, Frederick M. Kelley, then a young banker in Wall street. For several years Mr. Kelley alone held the concession now owned by the French company; he has spent his private fortune of one hundred and twenty thousand dollars in promoting the enterprise, to which he may still contribute energy and experience, the French company having shown some disposition to recognize his services. Americans are well acquainted with the man of great projects and speculations of whom "Colonel Sellers" is the comedy type. Mr. Kelley's experience is flavored with a kind of romance and a great deal of American self-confidence and business audacity, and well illustrates the varied fortunes of men who, looking in advance of the times,

give their lives to the task of making their fellow-men see as they do.

During the gold excitement, Benjamin Blagg, a New York merchant, started for California, but was led off into the valley of the Atrato in New Grenada, or the States of Colombia, by rumors of gold deposits to be found in that quarter. The gold-washing being unprofitable, it occurred to him to make practical use of Humboldt's statement, that one hundred and fifty years before, a priest living at Novita had directed his parishioners in the construction of a canal, since fallen into decay, across the narrow Raspadura Divide, or San Pablo Isthmus, thereby connecting the head-waters of the San Juan, flowing into the Pacific, with the head-waters of the great Atrato, emptying into the Gulf of Darien or the Atlantic (see map). It was believed also that the Indians had used this route for a canal passage, between the two oceans, for centuries, drawing their bungos over the divide, on which the waters of the Atlantic and Pacific water-sheds, in the form of rills, can be traced to within a few rods of each other. Blagg hastened to Bogota and obtained from the Colombian government a concession giving the exclusive right to construct and operate a canal connecting the Raspadura Creek with the head of bongo navigation on the San Juan. He then came back to New York and, supported by Humboldt's statement, made a sale of this concession to Mr. Kelley and several of his Wall street associates. John C. Trautwine was placed at the head of an expedition to explore the Atrato River from its mouth up to the Quito branch, by that to the Raspadura Creek, thence over the summit and down the San Juan to the Pacific. When the expedition started, the twenty-four shares in the company, worth \$1,000 at par, rose in the imaginations of their holders to \$50,000, but "tumbled out of sight" when the engineers reported that the route was not practicable, and that so far as they could learn, or discover on the ground, the Raspadura canal was a myth; though it was a fact that the Indians frequently pulled their bungos over the divide.

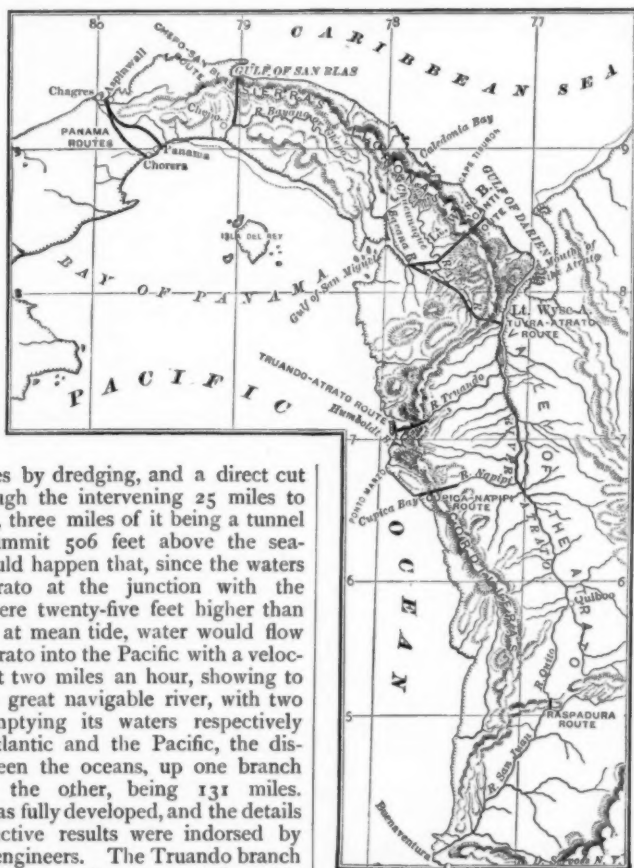
Mr. Kelley's colleagues presented him with the concession, as being of the value of waste paper, and withdrew; while he, then only twenty-eight years of age, determined to make an Isthmus Canal the work of his life. He privately fitted out a second expedition under Noah B. Porter and James C. Lane (competent engineers), which set

forth in 1853, and returned with scarcely more encouragement than the first. Mr. Lane, however, had discovered the mouth of the Truando River, and to explore it he was given the command of a third expedition fitted out with great care and expense. Mr. Kelley purchased a small yacht for the party, which departed in the spring of 1854, on board a sailing vessel. Putting into Aspinwall to discharge lumber, the crew were exposed to the Panama fever, of which the engineers were victims. Reaching Cartagena, Mr. Lane and party launched the yacht and sailed up the Atrato. Two of the men were obliged, by continued sickness, to return, while Mr. Lane and a plucky engineer, named Adams, reached the Truando and poled the yacht to its head-waters, where they thought they were about twenty-five miles from the Pacific, and believed they could see a remarkable depression in the mountains. They were too far reduced by sickness to think of penetrating further.

Disappointed, but not discouraged, Mr. Kelley sent out a fourth expedition in 1855 under William Kennish, with five engineers and some thirty-five natives. They were directed to cross the Isthmus to Panama and proceed down the Pacific coast to about seven degrees north latitude, looking out for a depression in the Cordilleras, and thence to run a line of levels across to the Truando. At the point indicated, which was in Humboldt Bay, Kennish found an inlet, which was named after Mr. Kelley, and saw a few miles away a marked depression in the mountain chain. Picking their way over the hills, they began cutting a path through the dense undergrowth to the tributaries of the Truando. So dense is the tropical undergrowth on all parts of the isthmus that an exploring party cannot penetrate a rod in many places before a way has been cut. Only one Indian hut was seen between the mountains and the confluence with the Atrato. Wild beasts, birds, and monkeys were frequently seen and heard screeching and howling, especially when the storms swept over the tropical forests. After passing the falls of the Truando the river widened and deepened until it became a succession of broad lagoons. Arriving at the Atrato, Mr. Kennish had satisfactory data for a unique plan of a canal without locks. At the point of junction the Atrato was found to be 100 yards wide and 53 feet deep, flowing slowly to the Atlantic, 63 miles away, and capable of floating the largest fleet. The mean level of the Atrato

at this point was found (by General Michler) to be only about 25 feet above the mean tide in the Pacific at Kelley's Inlet, where the tide rises twelve feet. Thereby it appeared that if the Truando were deepened

ment to verify his plans by a governmental survey such as would command the confidence of capitalists. President Pierce listened to the young canal advocate and was pleased with the project.



MAP OF THE ISTHMUS OF DARIEN AND THE VALLEY OF THE ATRATO, SHOWING PROPOSED CANAL ROUTES.

for 43 miles by dredging, and a direct cut made through the intervening 25 miles to the Pacific, three miles of it being a tunnel under a summit 506 feet above the sea-level, it would happen that, since the waters of the Atrato at the junction with the Truando were twenty-five feet higher than the Pacific at mean tide, water would flow from the Atrato into the Pacific with a velocity of about two miles an hour, showing to the world a great navigable river, with two mouths, emptying its waters respectively into the Atlantic and the Pacific, the distance between the oceans, up one branch and down the other, being 131 miles. This plan was fully developed, and the details and prospective results were indorsed by competent engineers. The Truando branch was to be on a grand scale: 200 feet wide and 30 feet deep, with two tunnels side by side piercing the Cordilleras, each to be 100 feet wide and 120 feet high,—in fact, large enough “to allow of the passage of a line-of-battle ship, with her top-mast and top-gallant-mast struck and her yards braced;” the whole work to cost, in round numbers, one hundred and fifty millions.

With everything mapped out, computed and planned, Mr. Kelley, in the spring of 1855, sallied forth to see what the world thought of his Atrato-Truando ship-canal without locks. He first asked the govern-

ment to verify his plans by a governmental survey such as would command the confidence of capitalists. President Pierce listened to the young canal advocate and was pleased with the project.

Jefferson Davis, Secretary of War, favored a survey, but there was no unappropriated money for it. The subject was discussed in cabinet meetings, at one of which Mr. Marcy, Secretary of State, said to Mr. Kelley's face that the scheme was a humbug. As for uniting with England and France for a joint survey, to give an international character and indorsement to the project, every member of the cabinet, except Mr. Davis, refused to listen to such a proposition, be-

cause they believed it to be opposed to the spirit of the Monroe doctrine.

Hopeless of accomplishing anything at home, Mr. Kelley sailed for England in November, 1855, carrying non-committal letters of introduction from Mr. Marcy to the American ministers in London, Paris and Berlin, and friendly letters from influential men to Humboldt, Sir Edward Belcher, George Peabody and others. In London, he was well received. James Buchanan, then minister to England, entered heartily into his plans, in many ways rendering him assistance, and insisted that his own government must participate with England and France in the survey, and actually tried to get the cabinet to reverse its decision. Mr. Buchanan impressed Mr. Kelley as being one of the most intelligent and accomplished gentlemen he ever met. He next made the acquaintance of Captain Fitz Roy, Sir Charles Fox and Dr. Black—men who had made a study of the canal question. They presented him to Lords Palmerston and

to unite with France and the United States in a survey.

Thus far he had succeeded in obtaining a hearing where he had most desired it; but his friends in London, including George Peabody and Dr. Black, regretted that, with such a gigantic scheme on his hands, he did not look older, for his appearance belied even his thirty-three years. They also advised him not to take his plans before the Royal Geographical Society and Institution of Civil Engineers, lest, receiving unfavorable criticism, he should thereby lose the promised aid of the British Cabinet. But the young enthusiast determined to risk both and in the meantime (this was January, 1856) ran over to Berlin and presented letters to Baron Humboldt, who was then enjoying universal homage. The baron not being at home when first he called, Mr. Kelley left his letters and the next day received a note, a fac-simile of the last paragraph of which is here reproduced to show in what diminutive characters Baron Humboldt wrote

French. Punctual to the appointment, he was shown into a plainly furnished room filled with books, maps, globes and scientific instruments. In a moment the old gentleman came through a side door, walking with a firm step, though then eighty-eight. His young guest was made to feel at home at once. Humboldt addressed him in fluent English and asked him first, what had induced so young a man to engage in an enterprise so vast; to which Mr. Kelley replied: "Your writings, Baron." For twenty minutes Humboldt poured forth a stream of varied and compact information about the Isthmus and the science of engineering.

He climbed a step-ladder with little sign of senility to get a book, and spreading out maps referred to them while he examined Mr. Kelley's. He regretted that surveys had not been made also of the Napipi, from the Atrato to its head-waters and on to Cupica Bay. When Mr. Kelley called again, by invitation, three days before his departure, Humboldt placed in his hands a long autograph letter of three foolscap pages, being a learned and hearty indorsement of his visitor's efforts in exploration, and with no mock modesty detailing his

Je ferai chaque jour de mon mieux pour vous rendre compte de tout ce qui se passera à New York et à Washington. Je vous envoie ci-joint une lettre de M. Charles Fox, de Londres, et une de M. Benjamin Franklin, de Washington, qui vous enverront des nouvelles de nos importantes projets.
A. V. Humboldt
Lond. 21 Jan 1856

FAC-SIMILE OF PART OF AN AUTOGRAPH LETTER FROM HUMBOLDT.*

Clarendon, who granted a long interview, carefully examined the plans and promised

* In translation this reads:

"I shall be delighted to receive Mr. Kelley of New York at my house to-morrow, Tuesday, January 22nd, at 11 o'clock, and thank him for the friendly letters he has brought me from Sir Charles Fox, of London, and my excellent friend Mr. Bache, of Washington, descendant of our great Benjamin Franklin. Captain Benham, one of the directors of the United States Coast Survey, informed me of your important project.

Your most humble and obedient servant

A. V. HUMBOLDT.

Monday, 21st January, 1856.

own contributions to the project. He says: "I think nothing more dangerous to the extension of commerce and to the freedom of international relations than to inspire an aversion to all future investigation by an absolute and imperious declaration that all hope of an oceanic canal must now be abandoned. I have too much faith in the powerful means afforded by the present state of civilization to be discouraged."

Returning to London, Mr. Kelley read a paper before the Institution of Civil Engineers on the practicability of a ship-canal without locks by the valley of the Atrato, confident that intelligent men and engineers would fully appreciate his aims and efforts; and so it proved. However, the first evening was one of uncertainties for Mr. Kelley. During the discussion, his plans were freely criticised, and some grave doubts were mingled with praise. Dr. Black and Captain Fitz Roy, an able authority, spoke in his favor, the latter saying: "This, certainly is one of those bold conceptions, which, if they fail, are termed chimerical; but, if they succeed (and it does appear that in this case there is a strong probability of success), immortalize the authors." A second evening was appointed to continue the long discussion, and at this Robert Stephenson, the eminent engineer, presided. The result was still uncertain. Mr. Kelley had procured a translation of the Humboldt letter, and in the midst of the proceedings sent it up to the secretary, who read it. After this, and when Robert Stephenson in closing the debate urged joint governmental survey, and said that "Mr. Kelley had produced more intelligible information upon the subject than had ever before been given to the world,"—he was no longer a shy petitioner at British doors. Soon afterward the Institution awarded him the Telford Gold Medal "for demonstrating the feasibility of uniting the two oceans by a canal without locks." The following week he read a different paper before the Royal Geographical Society, Rear-Admiral Beechey presiding. De Lesseps was present, his Suez scheme being at that time before the Society, and his maps hanging on the walls of another room. Robert Stephenson, Sir Edward Belcher, Dr. Black, Sir Roderick Murchison, Captain Fitz Roy and a large assemblage of members were present. His paper was discussed on two evenings, and Robert Stephenson again spoke favorably of the scheme. De Lesseps was asked to speak of his own plans, and began by saying that he trusted the Darien project

would prove practicable and be carried out. Not very long ago at the congress of Commercial Geography held in Paris, de Lesseps said that some persons would oppose the Darien project as a rival of the Suez Canal, but that he himself was opposed to monopolies and believed that anything which tended to increase commercial circulation would benefit the Suez Canal.

One day came an invitation from Robert Stephenson, asking Mr. Kelley to dinner at five o'clock, but hoping he might come at two for a preliminary chat.

"What do you think of de Lesseps' plan?" asked the engineer.

His guest hesitated, saying:

"I am not an engineer—neither by practice nor profession."

"But," said the host, "I think you are quite as capable of judging of this as I am."

"Then, I think de Lesseps' plans are perfectly feasible, much more so than my own," replied Mr. Kelley.

The engineer called for reasons.

"Because," said Mr. Kelley, "the Suez route traverses a perfectly dry, healthy climate; it is also flat, and an abundance of cheap labor can be had; besides, the engineering features are simple compared with those of my scheme, to be carried out in the hottest, wettest and unhealthiest climate in the world, where labor must be transported to the ground. Then it involves cutting a ship tunnel through the Cordilleras."

Mr. Stephenson thought the Suez Canal would require constant dredging.

"Yes," said his guest; "but it will prove such a vast benefit that it will pay to keep on dredging it forever."

To which Mr. Stephenson replied:

"I have had a line of levels run across Suez at my own private expense, and I am persuaded that the scheme is impracticable, on account of the drifting sands."

It was the mistake of a great man. He said he thought the Atrato-Truando project far more promising, and spoke in the highest terms of America and its enterprise. That de Lesseps did not meet with a very favorable reception in London, Mr. Kelley thought was due to British jealousy.

In July, 1856, Mr. Kelley went to Paris, against the advice of Mr. Buchanan, who, on setting off for home (probably on the lookout for the Presidency), promised to get the co-operation of the United States govern-

ment, with which, and with that of the British government already secured, he might hope to win over Napoleon to the project. But Mr. Kelley, knowing that the Secretary of State, Mr. Marcy, thought the ship-canal about as practicable as a route to the moon, did not long defer shipping his hobby across the channel. For six long months he worked incessantly to get an audience with the French emperor. John Y. Mason, the American minister, was very courteous, but rendered no assistance; for what reason Kelley never could divine. The French minister of foreign affairs, to whom he received an introduction, said "Very good," to the plans, and gave a shrug, a bow and a smile, and referred him to the American minister for a presentation. Likewise, the British and German ministers. Thus matters went on till January 26, 1857. On that day he was surprised to meet an English barrister and his wife—London friends—at *table d'hôte*. They inquired after his success in Paris, and he related his disappointments, the landlord and landlady, who for the first time learned the object of their guest's restless sojourn, listening with curious interest. After dinner, the barrister asked to see his maps, which were spread out on the table, nearly the entire company remaining to hear his story. Madame Mercier, the landlady, caught the canal fever at once. "You shall see the emperor," she cried. "My uncle is a friend of the emperor's. He will arrange the audience." Early the next morning, she drove off to see her uncle, La Fouché Pelletier, son of the first Napoleon's great friend, and on returning said to Mr. Kelley: "Remain at the hotel to-day, for I think the emperor will send for you." Her guest smiled incredulously; but between one and two o'clock came a message inviting him to an audience at the Tuileries at 5 P. M.

At the palace, Mr. Kelley was cordially received by the emperor, who assured him of his lively interest in all ship-canal projects. He had noticed, he said, that the Americans had thrown aside his own plan for a Nicaragua Canal. (While languishing in the prison at Ham, Napoleon had written a pamphlet on the Isthmus project.) When Mr. Kelley's plans were spread out, he said, "Mr. Kelley, you will please let me ask questions, as I find it easier to comprehend a subject by making inquiries." This was a gentle hint to the American citizen that the Emperor of the French felt himself capable of leading the conversation. And indeed his information was very full and

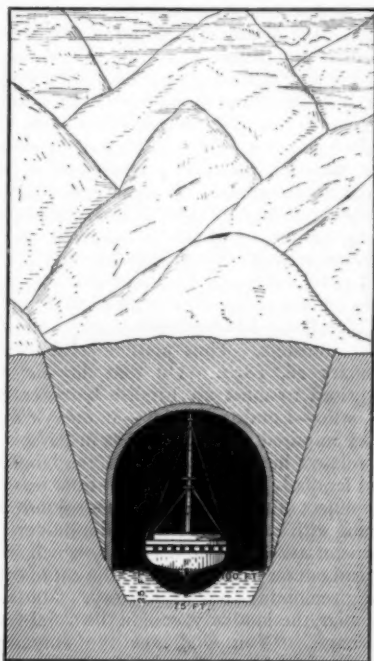
ready. He listened attentively to what was said, assisted in tracing out the lines on the maps, and was greatly pleased with the tangible shape in which the enterprise was presented. Twice he walked away, and appeared as if he would leave the room, returning each time to continue talking with animation. Finally he said: "Mr. Kelley, I like your plans. What can I do for you?" He offered to make the survey at the sole expense of the French government, to which Mr. Kelley could not assent, since he had invited the English to co-operate. Then he said he would pay a third, if the British and United States governments would agree to open the canal to the commerce of the world and make the territory neutral; moreover, if the survey was favorable, he thought he could guarantee one-third of the capital necessary to carry out the plans. Then, requesting further information after Mr. Kelley's return to America, Napoleon directed a servant to fold the maps, and withdrew.

Mr. Buchanan had now become President, and Mr. Kelley hastened home to take advantage of the old signs of friendship. The President, seeing him in a long line of visitors at the White House, called him out of the line, saying so that all might hear: "Here, at least, is one man who doesn't want office." The next day, at a private interview, Mr. Kelley asked Mr. Buchanan to join with the British and the French to make the survey, and was amazed to hear the President say: "I will do all in my power for you, but this can't be done." He reminded Mr. Buchanan of different opinions expressed in London. "Yes," the politician said smiling, "but it can't be done, and you mustn't ask me why." And so the man of deportment vacillated before the Magog of party expediency and the ghost of James Monroe. However, the government offered to make the survey independently of foreign powers, and Brigadier-general Michler of the army and Lieutenant Craven of the navy headed an expedition to the Atrato, which returned in May, 1858. A dispute arose as to which officer ranked the other, and thereby had the privilege of supervising the report. It took a year to settle this hotly contested point of red-tape etiquette, which resulted in a compromise. General (then Lieutenant) Michler made an exhaustive and able report in favor of the Atrato route, correcting and improving on Mr. Kennish's plans. Lieutenant Craven, in a brief report, declared adversely. Then it took another

year at Washington to get the report printed, by which time the rebellion had broken out, Mr. Kelley's concession had expired by limitation, and his brilliant and promising hobby had broken down completely. Impoverished in hopes and fortune, he retired from active advocacy of the scheme.

Mr. Kelley's enthusiasm revived, however, in 1863, when his attention was called to the San Blas route, between the Gulf of San Blas and the Bayano, or Chepo River, at the narrowest neck of the Isthmus, it being there only thirty miles from ocean to ocean. His own means being exhausted, he succeeded in interesting Cyrus Butler, and the late Luke T. Merrill in his plans. Mr. Butler, who has become a zealous advocate of the scheme, now owns a considerable share in the French company possessing the Darien concession. In the autumn of 1863, Captain Norman Rude, with the assistance of the natives, ran a barometrical line over the San Blas route. The following spring a surveying party was equipped, led by A. MacDougal. Beginning on the Pacific side they found a good harbor in the Bay of Chepillo; and discovered that the Bayano River would afford perfect ship navigation for more than ten miles with almost no improvement; and that for eight miles further the ground was admirably suited to canal purposes, crossing only one considerable stream, the Mamoni River. They were now at the foot of the Cordilleras, the summit of which was found to be 1,500 feet. Crossing over to the foot of the hills, on the Atlantic side, MacDougal estimated that the contemplated tunnel would be seven miles long; this was on the supposition that he was within three miles of San Blas Bay, affording a magnificent harbor, which, with its numerous islands, lay in full view before him, the land sloping gradually to the sea, with the Mandinga River some distance to the left. He attempted to triangulate the distance to the Gulf of San Blas, but hostile Indians compelled the party to beat a retreat. His report was highly satisfactory and plans were made for a canal. Since the tide at the starting-point of the canal, ten miles up the Bayano, rose nearly 13 feet, and on the other side in San Blas only $2\frac{1}{2}$ feet, the plans were made to comprise tidal locks at the extremities of the canal to prevent the waters of the Pacific at high tide from flowing through into the Atlantic with a current troublesome to the passage of ships, and also to prevent a counter-current during the

ebbing of the tide. The accompanying cut indicates the sectional area of the proposed



CROSS SECTION OF THE MOUTH OF THE PROPOSED SAN BLAS TUNNEL. HEIGHT OF TUNNEL, 115 FEET.

tunnel, 100 feet wide and 90 feet high above the water-line, 25 feet above the bottom of the canal, making the entire distance from the bottom to the crown of the arch, 115 feet. It was the aim of Mr. Kelley and Mr. Butler to re-secure a concession from the government at Bogota. During the administration of President Grant, both he and Secretary of State Hamilton Fish took great interest in the canal project, but the government thought the concession ought to be procured in the name of the United States. This, it is believed, excited the suspicions of the Colombian authorities, who demanded conditions rendering the concession practically worthless. In 1870, Commander Thomas O. Selfridge was placed at the head of an important governmental expedition to explore the Isthmus. Among other routes, he set out to verify from the Atlantic side the San Blas survey of MacDougal. He reached the summit, and the rainy season having set in, concluded to return. He gave it as his opinion, however, without

going entirely over the mountains, that the tunnel would be ten instead of seven miles long, while in other respects he admitted the general accuracy of MacDougal's survey. This assertion, based on insufficient data for a conclusive opinion, dampened the fervor with which the San Blas route had been received among engineers. Commander Selfridge then proceeded up the Atrato and surveyed the Napipi route to Cupica Bay, the investigation of which Humboldt had so strongly recommended. Selfridge's project may be described as the composite plan, for it contemplated locks (from three to twenty), a tunnel at least three miles long, and a reservoir and aqueduct to feed the summit level. He estimates the cost at about ninety millions, and the distance from ocean to ocean at 178 miles.

During the winter of 1875-76, de Lesseps formed an international society for the study of the American Isthmus. M. Gorgoza, who possessed a concession for a Darien Canal, which he had vainly tried to sell to prominent politicians in Washington, turned up in Paris, and repeated the statements he had made here, namely, that he had explored the Darien neck, from the Gulf of San Miguel *via* the Tuyra and Paya rivers, and so on to the Atrato, finding remarkable depressions, making a through-cut canal entirely feasible. This helped to set the ball of exploration rolling in Paris, and proved to be on a par with the nonsense that has always adhered to the history of the San Miguel region. About 1850 Dr. Cullen declared that he had crossed from the Savana River, emptying into the Gulf of San Miguel, to Caledonia Bay on the Atlantic, finding an opening in the hills, which would admit of a through-cut canal, with moderate cost of construction. He drew a fascinating bird's-eye view of the way his canal would look when completed, but of this value, that where he declares an open cut could be made through a depression in the hills, it would in reality be necessary to bore a tunnel some twelve miles long.

In 1876, the society of which General Türr is president, organized in Paris for the exploration of the San Miguel or Tuyra region, the stock of this speculative company being divided into 100 shares. De Lesseps would neither buy nor accept stock, preferring not to be identified with the private financial interests of the scheme, knowing that with respect to the general project the public would expect him to occupy an impartial or judicial position, and one devoid of

the suspicion of self-interest.* Among the gentlemen owning an interest in the company are M. Pereire, supposed to be worth over a hundred millions, and the owner of the French line of transatlantic steamships; P. M. Oppenheim, the wealthy Frankfurt banker; Cyrus Butler, of New York; G. Vedelius, a Swedish engineer, and two famous literary men, Émile Littré and Octave Feuillet, the dramatist. The most important member, to the company, has been Lieutenant Lucien N. B. Wyse, of the French navy, son of the late Sir Thomas Wyse and (as the Bonapartes style her) the "Princess" Letitia Bonaparte, daughter of Lucien, brother of Napoleon the First. Though only thirty-five years of age, Lieutenant Wyse has made many scientific explorations, besides serving both on sea and land in the Franco-German war. He has crossed the American continent from sea to sea, in twelve different places, between Patagonia and San Francisco. In March, 1878, he performed the journey of seven hundred miles from Buenaventura to Bogota, on horseback, in ten days. This tremendous ride was made over a common trail, with a fresh horse every two days, Lieutenant Wyse sustaining himself by eating balls of chocolate, and arriving in Bogota just in time to secure a canal concession from a friendly outgoing administration.

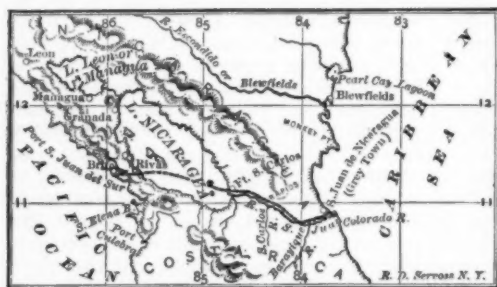
Between 1876 and 1879, Lieutenant Wyse made surveys of two canal routes by way of the Gulf of San Miguel and the Tuyra River to the Atlantic. One of these (marked A in the map on page 272) follows the valley of the Tuyra River and one of its branches, thence over the divide to the River Caguirri, which empties into the Atrato; this route requires twenty-five locks. The other (marked B), preferred by its projector, begins at the same point on the Tuyra, about twenty miles from the Gulf of San Miguel, proceeds east to the junction of the Tupisa with the Chucunaque, and then makes almost a straight line to the point of Acanti on the Atlantic side, where a harbor must be created. As projected by Lieutenant Wyse, the tunnel would have a length of about eight miles, a height of 118 feet, a width of 52½ feet at the bottom of the canal, and of 65 feet at the water line,—thus having a capacity smaller than the San Blas tunnel with a proposed width of 100 feet. In determining the width

* It is said that de Lesseps made no money out of the Suez Canal, and has had to meet the expenses of his position and family out of his salary of \$10,000 a year.

of the tunnel, weight must be given to the opinions of ship-owners. Of all things they fear to have a ship touch her sides against wall or pier, and as there is almost sure to be a current of between two and three miles an hour in the canal, a ship of only forty feet beam could be handled in this narrow channel only by great watchfulness and difficulty.

If the wisdom of the congress decides that a canal with locks is more practicable and desirable than a canal with a tunnel, the choice will undoubtedly lie between Lieutenant Wyse's Tuyra-Atrato and the Nicaragua routes, with a majority, at the

own lock project and his tunnel scheme respectively, at about the same sum,—in round numbers, one hundred millions. Passage through a canal being necessarily slow, there must be great difference in time and attendant expense between, on the one hand, drawing a ship by tug-boat through the Nicaragua Canal, 181 miles from ocean to ocean,—or even through the Tuyra-Atrato Canal, about 110 miles from sea to sea,—and, on the other hand, through the San Blas Canal, only 30 miles long, or through the Tuyra-Acanti line, with 42 miles of canal and tunnel and 20 miles of navigable



MAP OF THE PROPOSED NICARAGUA ROUTE.

outset, favoring the latter. But it is inconceivable that practical engineers, considering future usefulness no less than temporary facility of construction, would adopt a lock route, unless they believed it practically impossible, even at double the expense, to construct a tunnel canal on the mean tide level. Nicaragua Lake, a large navigable sheet of water extending to within sixteen miles of the Pacific, and having the San Juan River for its spacious outlet, has frequently drawn the attention of ship-canal projectors. Lieutenant Lull and Chief-Engineer Menocal, both of the United States navy, in the reports of their surveys make the distance from Brito to Greytown 181¼ miles, and place the cost of construction at about fifty-three millions, including the unfortunate necessity of making harbors (for no natural ones exist) at both termini. It is proposed to lock down from the lake to the Pacific and to improve navigation on the San Juan by means of locks and dams. M. Blanchet is at the head of an association owning a concession for this route, and will urge its claims before the congress. He thinks fourteen locks would be sufficient, and places the cost between forty and fifty millions of dollars. Lieutenant Wyse estimates the expense of his

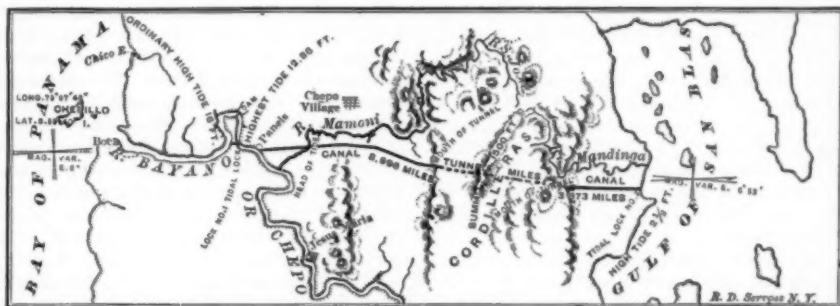
river. A ship of 5,000 tons burden could be pulled through the San Blas Canal probably in six hours, making "turn-outs" unnecessary, ships passing from the Atlantic to the Pacific one-half of the day, and going in the opposite direction the other seven or eight hours; while it is safe to say that, under the most favorable conditions, three or four days would be consumed in making the passage of the Nicaragua Canal.

The question of locks between five hundred and six hundred feet long—for there must be room both for the ship and the tug-boat—is in many respects more serious to solve than that of a ship-tunnel. Grave doubts are entertained by the ablest engineers of their ability to construct locks of that size capable of withstanding the water pressure, even supposing that lock-gates of the requisite dimensions could be made to open and shut with the necessary facility. What prudent ship-owner would care to put his ship of 5,000 tons burden, loaded with a valuable cargo, into a canal 181 miles long, involving the passage of twenty-four locks, if these locks were liable to get out of order, thereby delaying transit a week or a month? It must not be forgotten that a ship-canal will not be built to gratify engineering ambition or hydraulic theorists, but to satisfy the practical wants of ship-owners. De Lesseps is inclined to favor a tunnel, and declares the necessary conditions for a practicable canal to be: no locks, good harbors, and the avoidance of other than tidal rivers. Lieutenant Wyse is substantially of the same opinion, and Mr. Kelley and his engineers, convinced that no other kind of canal ever would be constructed, have steadily adhered to the tunnel plan.

As between the San Blas route advocated

by Mr. Kelley, Mr. Butler and others, and the Tuyra-Acanti route surveyed by Lieutenant Wyse, the public, applying the judgment of practical common sense, will probably say, "Other things being equal, choose the shortest way across." It is thirty miles

lodgment of logs and drift-wood, in a way to bank up the waters, would place little dependence on any possible grillage at the mouth of the roaring Chucunaque. On the San Blas route the Bayano River forms ten miles of the canal, almost ready made.



MAP OF THE PROPOSED CHEPO-SAN BLAS CANAL AND TUNNEL ROUTE.

over the San Blas Isthmus, and sixty-two miles between San Miguel and Acanti. Besides, it is very clear that "other things" are not equal, but are decidedly in favor of the San Blas route. Take the conditions named by de Lesseps. There is no better harbor on the Atlantic side of the Isthmus than that of San Blas, while at the other extremity of the line the Bay of Chepillo, a fair harbor, opens into the Bay of Panama. On the other hand, it is necessary to make a harbor at Acanti, though San Miguel is in every respect but one an excellent harbor. Here the extreme tide rises at the mouth of the Tuyra to the height of twenty-five feet, coming in with such force that ships are said sometimes to drag their anchors, while ordinary high tide at the mouth of the Bayano or Chepo (of the San Blas route) reaches only a height of about sixteen feet. Then as to the avoidance of other than tidal rivers: at the junction of the Chucunaque and the Tupisa rivers, Lieutenant Wyse proposes to turn both these rivers into his canal. The Chucunaque has always been noted for its floods. It has a very large water-shed, given to sudden and terrific rain-falls, the torrents coming down with a roaring sound which the natives recognize with dread. Further up the stream the water has been found to rise thirty and forty feet during the rainy season. Lieutenant Wyse proposes to protect the canal from the flood drift-wood by a strong grillage. Any one who has once witnessed what destruction to dams and piers on the upper Mississippi is frequently caused by the

And at the "Paneis" the canal empties into the Bayano, which flows by, and not into the canal. Between this point and the tunnel the only considerable stream crossed is the Mamoni. On the Atlantic side of the tunnel, the canal passes over three miles of smooth country, unbroken by streams, the Mandinga River lying a little to the north. Lieutenant Wyse estimates that his tunnel line would cost one hundred millions. If the San Blas tunnel is seven miles long, the line is estimated to cost \$87,550,000; if ten miles long, as Commander Selfridge supposes, it would cost \$108,500,000. Lieutenant Wyse, who made hasty examination of the line, thinks the tunnel could be reduced to nine and a half miles, and Mr. Kelley and Mr. Butler firmly believe that MacDougal is right in his estimate of seven miles. The United States government will be asked to make an official survey. Lieutenant Wyse thought so well of the San Blas route that he crossed the ocean during the winter to examine the Kelley-Butler plans, as well as to invite American representation at the congress. That extraordinary difficulties will be encountered in the construction of any proposed Isthmus canal, is most certain. In many respects, it would seem better if a ten-mile tunnel were required on the San Blas route; then a third of the canal would be the Bayano River, and a third a tunnel cut in imperishable rock, and protected from the floods, and in which the laborers could work during the rainy season. Rear-Admiral Ammen, who in an able pamphlet severely criticises the Tuyra-

Acanti route, lays much stress on the almost insurmountable difficulty of excavating the bottom of the tunnel twenty-five feet below the level of high tide, and on the cost of carrying away and depositing the excavated material. When the time comes for breaking ground, there will be means devised, probably, for overcoming these difficulties, as there will also be drills invented, making the construction of the tunnel, except that part below tide water, comparatively much cheaper and more expeditious than that of the St. Gothard tunnel. As to the disturbing influence of earthquakes, Lieutenant Wyse affirms that no danger is to be apprehended from them; even the galleries in the salt-mines of Colombia have never been shaken down.

When de Lesseps failed to procure governmental aid for the Suez Canal, as a last resort he appealed to the people, who subscribed more money than he wanted. If this canal congress, with the prestige and

authority derived from the eminent engineers who are expected to take part in the deliberations, settles on a route, an international company, similar to that which constructed the Suez Canal, will be formed with a capital of \$100,000,000; and de Lesseps ventures to say that the money will be subscribed within ninety days after the congress reaches a favorable decision. It will be a stock company of limited liability, and incorporated under the French law, which in some respects is most favorable to great financial transactions. According to the plan proposed, the present French company owning the concession and receiving compensation for it will be merged in the new company, of which de Lesseps is to be president and managing director. It is in the achievements of this one man that the world is likely to find the most substantial basis for the hope that we are at last approaching the successful solution of the great engineering problem of the century.

INVOCATION.

SCENT of the rose! . . .
 Breath of the new-plowed field and verdurous sigh
 From cosses budding! . . .
 Myrrhs that the chafing boughs
 Of aromatic pine-trees cause to fly
 O'er coily fern-tops, studding
 The layers damp of fronds that heap in long wind-rifted rows . . .

Bloom of the quince
 So firm and ruddy and tender to foretell
 Crisp fruit and solid! . . .
 Heart of the forest prince
 Of odor nuttier than the sandal smell! . . .
 And all ye marshes squalid
 Whose fog a savory saltness pricks, whose veins the clear tides rinse . . .

Hair of the night,
 Black where the stars glimmer in sparks of gold
 Through tresses fragrant . . .
 Breeze that in smooth, cool flight
 Trails a strange heat across the listening wold . . .
 Breast of the coy and vagrant
 Uncertain spring, beneath whose cold glows the great heart of light . . .

Clouds of the blue,
 Crowned by the sun and torn by lightning-jag . . .
 And joyous sparkles
 In seas and drops of dew . . .
 Ye smiles and frowns that alter where the crag
 Glitters and darkles! . . .
 Hear me, ye blissful, that alone see why I call on you!

SOME ASPECTS OF MATTHEW ARNOLD'S POETRY.

MR. MATTHEW ARNOLD's chief literary activity during his earlier years was as a poet. For a period of not far from fifteen years, he has come before the public mainly as a writer of prose. His poems were, both in substance and in form, such as find favor with the few rather than the many,—with the audience of Wordsworth, rather than that of Scott and Byron. In his principal prose works, he has addressed himself directly to the fundamental questions of New Testament religion, considering them with reference to historic fact and universal truth, to individual life and modern society. In his latest essays, he seems to be applying himself mainly to broad, practical problems, relating to the higher interests of English national life. It would not be difficult to trace, through this diversity of subject and method, a strongly marked unity and a steady growth.

The recent publication of his collected poems has called fresh attention to them. The qualities in them which will first impress appreciative readers are beauty, thoughtfulness, and sadness. The quality of sadness pervades the volume very deeply. This circumstance is somewhat eagerly laid hold of by those who have learned to dread in Mr. Arnold, as a prose writer, one of the most dangerous enemies of the traditional theology. "See," say they, "how this gospel, which is set up in opposition to supernatural Christianity, is a gospel of gloom and hopelessness." But whatever temporary polemical value there may be in this line of remark, it quite fails to penetrate the full significance of the poet it deals with. Mr. Arnold's poems are sad partly because he is the true poet of that class who unite intellectual activity with moral earnestness; and the characteristic mood of that class in England, during the generation that is passing, has been largely a mood of sadness. It is a sadness that comes from a sense of the insolubility of the great problems of human destiny.

The change from old forms of faith, in men of moral sobriety, has generally, I think, three stages. Sometimes one person goes through them all; often he does not get well beyond the first or the second; and the three shade into one another imperceptibly, and not seldom to some extent co-exist. The first stage is one of conscious

and agreeable liberation. Those elements in the old belief which galled the moral sense are thrown off. The view of human character and the world's history escapes from the narrowness of dogmatic interpretations; the lights and shadows become broader; a wider kinship with human nature is recognized; the mood is one of elation and hope. I think Dr. Thomas Arnold very fairly represents, in the Church of England, this first stage of intellectual progress. He brought into the religious field not only a large, humane, and sympathetic manhood, but a strong aptitude for historical study; and history is the great solvent of dogma. But Dr. Arnold's mind did not carry him to any questioning of the central historical facts upon which Christianity based itself.

But that method and spirit of investigation, of which the first results are so acceptable, carries the logical mind, in course of time, upon far more difficult ground, and into far deeper struggles. One by one the accepted historical foundations seem to crumble. Philosophy and material science fail to answer the most importunate questions. The soul, in this second stage of movement from its old creed, stands face to face with the terrible doubt: Is human life ruled by any power that it can comprehend, or worship, or trust?—and finds no affirmative answer.

That is the great doubt which has saddened a large proportion of the thoughtful men in Matthew Arnold's generation. The most fervent piety and the most active benevolence in the Church of England have been, to a great extent, in the extreme High Church party, whose methods of thought and very axioms have been such as the best intellect of the time must reject. Those who are called Broad Churchmen have been too utterly disunited among themselves to constitute a school of thought, and have, upon the whole, been deficient in spiritual leadership. The influence of Maurice, who was a spiritual leader, was weakened by excessive mysticism and by a constant desire to reconcile dead formula with living truth. Robertson was a master spirit, but he stood alone, and the light he throws on questions of religious philosophy is largely indirect; his fruit is precious, but it was largely left for a later generation to gather. Outside of the Church of England, there have been

men of deep religious sentiment and men of profound and resolute thought; but the two streams have not flowed into one. In this respect, in John Stuart Mill were embodied the two unreconciled forces of his time: a mind which cannot find God, and a heart which cannot rest without Him.

It is this period of which Matthew Arnold is the characteristic poet. As Keble represented the piety of the mediæval revival, as Swinburne represents the world and the flesh in their newest dress, so Arnold, in his poems, represents the doubts and sadness and unsatisfied aspiration of his time. How far the sadness in his poetry may be temperamental, we do not know. But certainly there is nothing in their other qualities that would indicate morbidness. No; the qualities of health—with one exception—are there. The perfection of literary form intimates the same strong self-control which in the sentiment never disappears, even when grief is keenest or darkness is most unrelieved. That mother of health, a profound and receptive love of nature, yields constant and finest inspiration. There is sensuousness wholly untainted by sensuality. Yet there is wanting one condition of moral health,—sympathetic intercourse with common humanity. There is a lonely isolation; we move in a world of contemplation, of intimate familiarity with nature in all her moods, of vivid survey of history in panoramic aspects, of high aspiration and resolve. But we miss the warm, familiar atmosphere of the household, with its fireside and its cradle, its unconscious sacrifices and homely loves. We are somewhat remote from the humble, universal humanities, in which, as in a broad mirror, the highest truth often shines. In much of Wordsworth's poetry we are secluded from ordinary human companionship, and move upon heights trodden only by the few. But Wordsworth's heart warms at the sight of the peasant mother and her idiot boy, or at the grief of the little girl who has lost her tattered cloak. If with one side of his nature he touches the heights of serene calm, upon another side he is in close sympathy with ordinary humanity. Here, we cannot but think, is one secret of the want of spiritual trust, not in Arnold alone, but in a large class of thinkers who, in the strenuousness of their pursuit of truth, become somewhat unsensitive to the humble lives around them. That is a deep saying: "If a man love not his brother whom he hath seen, how can he love God whom he hath not seen?"

It does not belong to our present plan to consider, except incidentally, the very great literary beauty and power of Mr. Arnold's poems; but only to touch on a few illustrations of the religious sentiment in them. It is not too much to say that that sentiment supplies their deepest element. Mr. Arnold is a true poet, but he is intensely and profoundly ethical. He is seeking always the highest truth. He is bent on the wisest and most successful conduct of life. This is the sentiment and purpose which give unity to his poetry and prose, more than the acuteness, the grace, the imagination, which are common to them both. But his work is far too large and varied to be summed in any formula.

It is but rarely that we find in a single poem of Mr. Arnold's that debate between two opposite interpretations of life which is expressed in Tennyson's "The Two Voices." Tennyson, too, is the poet of an age in which doubt is strong. But his most characteristic and finest utterance is the victory of faith over doubt. The struggle is set forth in "In Memoriam," where the death of a dearly loved friend forces upon the soul the question of an after life, and the larger question of which that is a part, the reality of a beneficent divine order of the universe. The final answer is one of sublime calm and assurance.

The religious key-note of Mr. Arnold's earlier poetry is the self-reliance of a strong and proud soul, which relinquishes as childish the hope of finding any response to human wants and aspirations outside of the soul itself. Not less than this, I think, is implied in the sonnet among the "Early Poems," entitled "Religious Isolation":

"Children (as such, forgive them) have I known,
Ever in their own eager pastime bent
To make the incurious bystander, intent
On his own swarming thoughts, an interest own—

"Too fearful or too fond to play alone.
Do thou, whom light in thine own inmost soul
(Not less thy boast) illuminates, control
Wishes unworthy of a man full-grown.

"What though the holy secret, which molds thee,
Molds not the solid earth? though never winds
Have whispered it to the complaining sea,

"Nature's great law, and law of all men's minds?—
To its own impulse every creature stirs;
Live by thy light, and earth will live by hers!"

In one of his later poems, "Memorial Verses," Mr. Arnold gives noble praise to Wordsworth. Goethe and Byron were al-

ready gone; now at Wordsworth's death "The last poetic voice is dumb." The characterization of the first two is very striking:

"When Byron's eyes were shut in death,
We bowed our head, and held our breath.
He taught us little; but our soul
Had felt him like the thunder's roll.
With shivering heart the strife we saw
Of passion with eternal law;
And yet with reverential awe
We watched the fount of fiery life
Which served for that Titanic strife."

Equally fine is the description of Goethe, "physician of the iron age:"

"He took the suffering human race,
He read each wound, each weakness clear;
And struck his finger on the place,
And said: 'Thou ailest here, and here!
He looked on Europe's dying hour
Of fitful dream and feverish power;
His eye plunged down the weltering strife,
The turmoil of expiring life—
He said: 'The end is everywhere;
Art still has truth, take refuge there!'
And he was happy,—if to know
Causes of things, and far below
His feet to see the lurid flow
Of terror, and insane distress,
And headlong fate, be happiness."

The quality for which Wordsworth is praised as unique is his power of waking spontaneous, unreflective, happy emotion:

"He found us when the age had bound
Our souls in its benumbing round;
He spoke, and loosed our heart in tears.
He laid us as we lay at birth
On the cool, flowery lap of earth;
Smiles broke from us and we had ease;
The hills were round us, and the breeze
Went o'er the sun-lit fields again;
Our foreheads felt the wind and rain;
Our youth returned; for there was shed
On spirits that had long been dead,
Spirits dried up and closely furled,
The freshness of the early world.

* * * * *
Others will teach us how to dare,
And against fear our breast to steel;
Others will strengthen us to bear—
But who, ah! who will make us feel?
The cloud of mortal destiny,
Others will front it fearlessly—
But who, like him, will put it by?"

It is as poet and not as critic that Mr. Arnold writes this. Yet when we escape from the charm of the poetry, it is impossible not to say, "But this is not Wordsworth's special quality!" He does, indeed, express at times a spontaneous, unreflective joy in nature. But his most essential characteristic is that he recognizes in nature a mysterious kinship with man. He, above all others,

invests her grandeur and loveliness with a profound spiritual meaning. He does not "put by the cloud of mortal destiny;" he fronts it,—not defiantly or despairingly, but with the calm and solemn courage of one who sees in it a divine meaning. It is because nature is to him the symbol of a Divine Presence that his poetry is full of consolation and of spiritual energy; it is because Mr. Arnold, with a sad courage that vainly strives to be content, renounces the hope of any discernible common law reigning in the human spirit and the outward world, that most of his poetry is so profoundly sad.

He uses the imagery of nature with singular power and beauty. Thus, in the poem called "The Future," he expands that trite figure, "the river of time," in a series of marvelous pictures. There is the old refrain of sadness; the early freshness of earth is gone forever:

"What girl
Now reads in her bosom as clear
As Rebekah read, when she sate
At eve by the palm-shaded well?
Who guards in her breast
As deep, as pellucid a spring
Of feeling, as tranquil, as sure?"

"What bard,
At the height of his vision, can deem
Of God, of the world, of the soul,
With a plainness as near,
As flashing, as Moses felt,
When he lay in the night by his flock
On the starlit Arabian waste?
Can rise and obey
The beck of the Spirit like him?"

But when the music of this strain dies on the ear, Truth will have hearing, and say, "Not so! In many a woman's heart to-day the spring of feeling is as deep, as pellucid, as tranquil, as in that distant age whose beauty to our eyes is in truth a reflection from realities nearer to us. Many a loyal soul to-day hears as clearly, obeys as swiftly, the call of the Spirit, as any seer of old."

But the poem moves on its majestic way:

"But what was before us we know not,
And we know not what shall succeed.

"Haply, the river of Time—
As it grows, as the towns on its marge
Fling their wavering lights
On a wider, statelier stream—
May acquire, if not the calm
Of its early mountainous shore,
Yet a solemn peace of its own.

And the width of the waters, the hush
Of the gray expanse where he floats,

Freshening its current and spotted with foam
 As it draws to the Ocean, may strike
 Peace to the soul of the man on its breast—
 As the pale waste widens around him,
 As the banks fade dimmer away,
 As the stars come out, and the night-wind
 Brings up the stream
 Murmurs and scents of the infinite sea."

In these lines there is a power like Nature's own. The soul is lifted above the region of articulate thought; its own questionings are forgotten; it is hushed in a sacred awe.

There runs through these poems a strong moral energy, breaking out at times into hot scorn of the world's dullness and apathy. Thus, in a sonnet (among the earlier poems) "Written in Emerson's Essays:"

"O monstrous, dead, unprofitable world,
 That thou canst hear, and hearing, hold thy way!
 A voice oracular hath pealed to-day,
 To-day a hero's banner is unfurled;

"Hast thou no lip for welcome?"—So I said.
 Man after man, the world smiled and passed by;
 A smile of wistful incredulity,
 As though one spake of life unto the dead."

In the "Last Word" we have embodied the courage of despair:

"Creep into thy narrow bed,
 Creep, and let no more be said!
 Vain thy onset! All stands fast.
 Thou thyself must break at last."

"They out-talked thee, hissed thee, tore thee?
 Better men fared thus before thee;
 Fired their ringing shot and passed,
 Hotly charged—and sank at last."

"Charge once more, then, and be dumb!
 Let the victors, when they come,
 When the forts of folly fall,
 Find thy body by the wall!"

Whatever gospel there is in these pages—with here and there an exception—is a gospel for the strong. The sonnet on "Immortality" would give it as the boon only of the few,—not of those who, "foiled, depressed, outworn," look forward to another world for the victory they have missed here.

"And will not, then, the immortal armies scorn
 The world's poor, routed leavings? or will they,
 Who failed under the heat of this life's day,
 Support the fervors of the heavenly morn?"

"No, no! The energy of life may be
 Kept on after the grave, but not begun;
 And he who flagged not in the earthly strife,

"From strength to strength advancing—only he,
 His soul well-knit, and all his battles won,
 Mounts, and that hardly, to eternal life."

This may seem the temper of Stoicism rather than of Christianity. Mr. Arnold

is for the most part the characteristic poet of modern Stoicism. Yet, the idea of this sonnet is closely kin to Christ's own saying: "Strait is the gate and narrow is the way that leadeth unto life, and few there be that find it." It is only when unfairly pressed into literalness that the saying is a hard one, and we may perhaps say the same of the sonnet. That which follows it has a fine tenderness:

"He saves the sheep, the goats he doth not save."
 So rang Tertullian's sentence, on the side
 Of that un pitying Phrygian sect which cried:
 'Him can no fount of fresh forgiveness lave,

"Who sins, once washed by the baptismal wave."—
 So spake the fierce Tertullian. But she sighed,
 The infant Church! Of love she felt the tide
 Stream on her from her Lord's yet recent grave.

"And then she smiled; and in the Catacombs,
 With eye suffused, but heart inspired true,
 On those walls subterranean, where she hid

"Her head 'mid ignominy, death, and tombs,
 She her Good Shepherd's hasty image drew—
 And on his shoulders, not a lamb, a kid."

Of the sonnets, we can, for want of space, quote only one more,—that upon the last prayer of Augustine's mother. Like some others of these poems, it belongs in its religious quality not to any place or time, but to the Church Universal:

"Ah, could thy grave at home, at Carthage, be!—
 Care not for that, and lay me where I fall!
 Everywhere heard will be the judgment-call;
 But at God's altar, oh! remember me."

"Thus Monica, and died in Italy.
 Yet fervent had her longing been, through all
 Her course, for home at last, and burial
 With her own husband, by the Libyan Sea.

"Had been! but at the end, to her pure soul
 All tie with all beside seemed vain and cheap,
 And union before God the only care.

"Creeds pass, rites change, no altar standeth whole;
 Yet we her memory, as she prayed, will keep,
 Keep by this: *Life in God, and union there!*"

Among the shorter poems of the book, one of the strongest is the prayer which bears the name "Stagirus"—an unfortunately obscure title, which the note does not sufficiently explain. The sense of the Being prayed *to* is dim; the sense of the things prayed *for* is intense,—as in this passage:

"When the soul, growing clearer,
 Sees God no nearer;
 When the soul, mounting higher,
 To God comes no nigher;
 But the arch-fiend Pride

Mounts at her side,
 Foiling her high emprise,
 Sealing her eagle eyes,
 And, when she fain would soar,
 Makes idols to adore,
 Changing the pure emotion
 Of her high devotion,
 To a skin-deep sense
 Of her own eloquence;
 Strong to deceive, strong to enslave—
 Save, oh! save."

Mr. Arnold is far too great a poet not to rise sometimes into a serene and sunny atmosphere, even in his most serious poems. In "Morality," there is a rare and bright inspiration. The mind is repeatedly lifted by an unexpected turn of thought; in the last instance by a Platonic allusion full of power and surprise. The poem has the temper of firm endurance, which is the precious contribution of Stoicism, of whatever age; but it has also the uplift and illumination of the more spiritual faith.

"We cannot kindle when we will
 The fire which in the heart resides;
 The spirit bloweth and is still,
 In mystery our soul abides.
 But tasks in hours of insight willed
 Can be through hours of gloom fulfilled."

(A couplet worthy to be carried with one as a moral talisman!)

"With aching hands and bleeding feet
 We dig and heap, lay stone on stone;
 We bear the burden and the heat
 Of the long day, and wish 'twere done.
 Not till the hours of light return
 All we have built do we discern."

"Then, when the clouds are off the soul,
 When thou dost bask in Nature's eye,
 Ask, how *she* viewed thy self-control,
 Thy struggling, tasked morality—
 Nature, whose free, light, cheerful air,
 Oft made thee, in thy gloom, despair."

"And she, whose censure thou dost dread,
 Whose eye thou wast afraid to seek,
 See, on her face a glow is spread,
 A strong emotion on her cheek!
 'Ah child!' she cries, 'that strife divine,
 Whence was it, for it is not mine?'"

"There is no effort on *my* brow—
 I do not strive, I do not weep;
 I rush with the swift spheres, and glow
 In joy and when I will, I sleep.
 Yet that severe, that earnest air,
 I saw, I felt it once—but where?"

"I knew not yet the gauge of time
 Nor wore the manacles of space,
 I felt it in some other clime,
 I saw it in some other place.
 'Twas when the heavenly house I trod,
 And lay upon the breast of God."

It is in the dramatic poem, "Empedocles on Etna," that Mr. Arnold gives most full

and powerful expression to the unanswered questionings which make the tragedy in the intellectual life of this age. He avails himself of the story of that ancient philosopher who ended his course by throwing himself into the crater of Etna. Mr. Arnold has the highest qualities of the antique form,—simplicity, clearness, music, perfect self-control. The dramatic action of the poem is very simple. The personages are three: a harp-player, whose songs in the distance serve as occasional interludes, relieving the intense strain of thought; Pausanias, the physician,—"good, learned, friendly, quiet man"; and Empedocles himself. The two latter walk up the mountain together, the philosopher conversing with his friend, and giving him so much of his view of life as can be shaped in some sort to practical purpose, advising him in the true Stoic temper to make the best of a lot to which neither great hope nor despair is appropriate. In the meantime, the harp-player, unseen in the forest, obeying a hint of Pausanias, tries by an occasional song to charm away the melancholy of Empedocles. Then the philosopher is left alone, and in soliloquy pours out all the hopelessness of his soul, its utter bafflement before the problem of human destiny. The songs of Callicles yet reach him from time to time, but the accompaniment that best fits with his own mood is the melancholy and awful scenery of the volcano's peak, and in the volcano's mouth he terminates the struggle.

It is difficult to break from the perfect whole of the poem any fragments by which to illustrate its character, so subtly and harmoniously the whole is blended. At the opening, the harp-player sits alone beside a forest-path. He speaks:

"The mules, I think, will not be here this hour;
 They feel the cool wet turf under their feet
 By the stream-side, after the dusty lanes
 In which they have toiled all night from Catana,
 And scarcely will they budge a yard. O Pan,
 How gracious is the mountain at this hour!
 A thousand times have I been here alone
 Or with the revelers from the mountain towns,
 But never on so fair a morn;—the sun
 Is shining on the brilliant mountain-crests,
 And on the highest pines; but farther down,
 Here in the valley, is in shade; the sward
 Is dark, and on the stream the mist still hangs;
 One sees one's foot-prints crushed in the wet grass,
 One's breath curls in the air; and on these pines
 That climb from the stream's edge, the long gray
 tufts,
 Which the goat loves, are jeweled thick with dew.
 Here will I stay till the slow litter comes.
 I have my harp too—that is well.—Apollo!
 What mortal could be sick or sorry here."

It is by consummate art, like that of the great classic masters, that the breath of the forest and the morning sustains and soothes the mind, while the sad human story works itself out.

As his parting gift to the good Pausanias, Empedocles gives to that stern view of life as without God or a hereafter, to which he has been driven, the best face it will wear.

"Is it so small a thing,
To have enjoyed the sun,
To have lived light in the spring,
To have loved, to have thought, to have done;
To have advanced true friends, and beat down baffling
foes ?

I say: Fear not! Life still
Leaves human effort scope.
But since life teems with ill,
Nurse no extravagant hope;
Because thou must not dream, thou need'st not then
despair!"

But when, at the departure of Pausanias, he has taken his final leave of human fellowship, he turns to thoughts gloomier than the scenes amid which he now stands.

"Alone!—
On this charr'd, blackened, melancholy waste,
Crowned by the awful peak, Etna's great mouth,
Round which the sullen vapor rolls.—Alone!"

His purpose of death is fixed. He says to himself:

"For something has impaired thy spirit's strength,
And dried its self-sufficing fount of joy;
Thou canst not live with men nor with thyself.—

Before the soul lose all her solemn joys,
And awe be dead, and hope impossible,
And the soul's deep, eternal night come on—
Receive me, hide me, quench me, take me home!"

A song in the distance arrests him. He glances back over the sweetness of his earlier days, only to feel again the loneliness of the present. The stars come out above him; the volcano glows at his feet: life, life brilliant and intense,—he alone is dead to life and joy. To the elements he will return—but, mind? will that perish too? Or will it return to earth to repeat the fruitless round, and mankind go deeper and deeper in nothingness, and be forever astray? Now, at the very last, he partly sees where his own mistake has lain.

"Slave of sense
I have in no wise been; but, slave of thought?—
And who can say: I have been always free,
Lived ever in the light of my own soul?
I cannot; I have lived in wrath and gloom,
Fierce, disputatious, ever at war with man,

Far from my own soul, far from warmth and light.
But I have not grown easy in these bonds—
But I have not denied what bonds these were.
Yea, I take myself to witness,
That I have loved no darkness,
Sophisticated no truth,
Nursed no delusion,
Allowed no fear!

"And therefore, O ye elements! I know—
Ye know it, too—it hath been granted me
Not to die wholly, not to be all enslaved.
I feel it in this hour. The numbing cloud
Mounts off my soul; I feel it, I breathe free.

"Is it but for a moment?
Ah, boil up, ye vapors!
Leap and roar, thou sea of fire!
My soul glows to meet you.
Ere it flag, ere the mists
Of despondency and gloom
Rush over it again,
Receive me, save me!" [*He plunges into
the crater.*]

A song from the unconscious Callicles below pictures the beauty of the night, the procession of Apollo and the Muses; and after the terrible tension of the mind it is filled at the close with images of peace and calm.

These extracts give but a most inadequate suggestion of the power of the poem. Its deepest power lies in this, that the calm, deliberate, hopeless view of the universe which Empedocles expresses, and which in his longest address to Pausanias, from which we have quoted only two stanzas, he sets forth at large, are the full expression of the doubts and fears which haunt the minds of men to-day. As the expression of one man's experience, they constitute a deep tragedy; as the epitome of what thousands of men have felt in some degree, the tragedy broadens and intensifies indefinitely.

The closing poem of the book, called "Obermann Once More," is very remarkable, not only in itself, but because, standing where it does, it has the effect of an entrance into a higher region of thought and feeling. It is preceded by "Stanzas in Memory of the Author of 'Obermann,'" which bears the date of November, 1849. This almost unknown writer is described by Mr. Arnold as a man of austere sincerity, delicate feeling for nature, and melancholy eloquence. A solitary soul, he retired among the Alps, near Vevey; and there ended his life, which extended from 1770 to 1846. These memorial stanzas, written in deep sympathy with him who is their subject, picture charmingly the beauties of the Alps; yet, in the pages of Obermann which describe them, there is an undertone of "languor, cold, and death."

"Yes, though the virgin mountain-air
Fresh through these pages blows;
Though to these leaves the glaciers spare
The soul of their mute snows;

"Though here a mountain-murmur swells
Of many a dark-boughed pine;
Though, as you read, you hear the bells
Of the high-pasturing kine;

"Yet, through the hum of torrent lone,
And brooding mountain-bee,
There sobs I know not what ground-tone
Of human agony."

In Obermann the poet sees one borne down by the troubles and perplexities of his age. Nature soothed, but could not console or reanimate. The verses close with a burst of feeling such as the author rarely gives way to:

"Farewell! Under the sky we part,
In this stern alpine dell.
O unstrung will! O broken heart!
A last, a last farewell!"

The poem which follows this, and closes the book, is entitled, "Obermann Once More" (composed many years after the preceding). An expression in the first stanza implies that twenty years measures the time between them. The poet returns to his old friend:

"Once more I slip my chain,

And to thy mountain-chalet come,
And lie beside its door,
And hear the wild bee's alpine hum,
And thy sad, tranquil lore!"

When the night is falling, the spirit of Obermann appears to him. It is the old friend and teacher, but he brings a new message:

"Thou fled'st me when the ungenial earth,
Man's work-place, lay in gloom.
Return'st thou in her hour of birth,
Of hopes and hearts in bloom?"

In swift retrospect Obermann recalls to him great events of the past: the birth of Christianity, its decay, the shock of the French Revolution. Some of the condensed pictures are wonderful. What an epitome of the Greek-Roman world at the Christian era is this!

"Perceiv'st thou not the change of day?
Ah! carry back thy ken,
What, some two thousand years! Survey
The world as it was then!

"Like ours it looked in outward air,
Its head was clear and true,
Sumptuous its clothing, rich its fare,
No pause its action knew.

"Stout was its arm, each thw and bone
Seemed puissant and alive—
But ah! its heart, its heart was stone,
And so it could not thrive!

"On that hard Pagan world, disgust
And secret loathing fell.
Deep weariness and sated lust
Made human life a hell.

"In his cool hall, with haggard eyes,
The Roman noble lay;
He drove abroad, in furious guise,
Along the Appian way.

"He made a feast, drank fierce and fast,
And crowned his hair with flowers—
No easier nor no quicker passed
The impracticable hours.

"The brooding East with awe beheld
Her impious younger world.
The Roman tempest swelled and swelled,
And on her head was hurled.

"The East bowed low before the blast
In patient, deep disdain;
She let the legions thunder past,
And plunged in thought again.

"So well she mused, a morning broke
Across her spirit gray.
A conquering, new-born joy awoke,
And filled her life with day."

It is difficult to stop in this quotation, but we cannot give the whole poem. In equally vivid imagery is represented the triumph of Christianity, the new life with which it filled the dead old world. The victorious West hears its words: veils her eagles, snaps her sword, lays her scepter down.

"Lust of the eye and pride of life,
She left it all behind,
And hurried, torn with inward strife,
The wilderness to find.

"Tears washed the trouble from her face,
She changed into a child!
'Mid weeds and wrecks she stood—a place
Of ruin—but she smiled!"

"The glorious impulse lasted long," continues Obermann, "but it ended at last.

"That gracious Child, that thorn-crown'd Man,
He lived while we believed.

"While we believed, on earth he went,
And open stood his grave.
Men called from chamber, church, and tent,
And Christ was by to save.

"Now he is dead! Far hence he lies,
In the lorn Syrian town;
And on his grave, with shining eyes,
The Syrian stars look down."

The old faith is dead; the new is not born. "That," says Obermann, "was my sad message to the world. I said to it:

"Your creeds are dead, your rites are dead,
Your social order, too!
Where tarries he, the Power who said:
'See, I make all things new?'"

"The millions suffer still, and grieve.
And what can helpers heal
With old-world cures men half believe,
For woes they wholly feel?"

"But now the old is out of date,
The new is not yet born,
And who can be *alone* elate,
While the world lies forlorn?"

"This it was," the Spirit goes on, "that
drove me to Alpine solitudes. But—

"Despair not thou as I despaired,
Nor be cold gloom thy prison!
Forward the gracious hours have fared,
And see, the sun is risen!"

"He breaks the winter of the past;
A green, new earth appears.
Millions, whose life in ice lay fast,
Have thoughts, and smiles, and tears."

"What though there still need effort, strife?
Though much be still unwon?
Yet warm it mounts, the hour of life;
Death's frozen hour is done!"

"The world's great order dawns in sheen,
After long darkness rude;
Divinelier imaged, clearer seen,
With happier zeal pursued."

"What still of strength is left, employ
This end to help attain:
*One common wave of thought and joy,
Lifting mankind again!*"

The vision ends; the poet wakes; only
the torrent's voice is heard; the peaks tower
against the star-sown sky. By some vague
impulse he turns eastward.

"And glorious there, without a sound,
Across the glimmering lake,
High in the Valais-depth profound,
I saw the morning break."

So the book ends—facing the sunrise.

We have said that in Mr. Arnold's poetry
and prose there are traceable a strongly
marked unity and a steady growth. The
sentiment that links the poetry to the prose
is found in this closing poem, in which the
author is bidden by the sympathetic spirit of
Obermann to give his remaining strength to
help attain this end:

"One common wave of thought and joy,
Lifting mankind again."

The prose writings of his later years are
an attempt in this direction. Without dis-
cussing the soundness of his interpretations
of the Bible, it is enough here to point out
that he finds in religion the great hope of the

human race, and that his conception of relig-
ion lays supreme stress on conduct and char-
acter. Reduced to an intellectual form, his
later creed might not seem greatly to differ
from his earlier one. But the spirit and
temper are different. Instead of isolation,
there is the effort to serve. There is the
recognition that Christ had the secret of
life; the perception that the deepest truth
embodied in Christ is untouched by all the
new discoveries of thought; the sense that
joy and peace are not a lost treasure of the
ancient world. There is the consciousness
that moral fidelity finds its true completion
in brotherly love and unfearing trust and
broadening hope.

The new and larger life breaking upon the
world, like the sunrise upon the Alps, is not
to be measured by Mr. Arnold's creed, or by
any creed, new or old. Fashion our theo-
ries and doctrines as wisely as we can, they
very imperfectly express the great realities,
of which we may have a living conscious-
ness deeper than all our speculations. The
"common wave of thought and joy," whose
uplift is felt by brave hearts, is much more
than a new interpretation of history or re-
ligious philosophy. It includes all the great
onward movement of mankind,—mixed, it
is true, and fluctuating, yet pulsating now
with new intensity and new elation. To it
belong all the half-articulate aspirations of
classes and nationalities, all social reforms,
all strenuous and successful study of nature,
all resolute inquiry into distinctively relig-
ious truth. To this same onward movement
especially belongs the swiftly growing per-
ception that religion centers in character.
And out of this perception and crowning it,
comes the reviving sense of a spiritual mean-
ing in life, and a sublime destiny inviting
not only the race, but the individual.

It is in the sentiment of "Obermann Once
More" that we recognize a noble expression
of what we have regarded as the third and
final stage in the religious progress of
thoughtful minds. It is the serene trust
which comes, under whatever form of intel-
lectual belief, after the season of doubt and
dread which succeeds to the first elated sense
of liberation. But the ultimate unspeakable
trust is to be hoped for only when, through all
its uncertainties, the soul has remained true
to its convictions of moral right. The most
memorable passage in Robertson's works is
that in which, out of his own experience, he
gives this lesson. We quote it here, partly
because it is eminently appropriate to our
subject. Throughout these poems, not less

than in their author's prose, however keen the sensibility to pleasure, however hopeless at the moment may appear the problem of life, there is a steadfast, loyal fidelity to morality; never the impulse to grasp recklessly the joys of sense; never the disposition to say, "Evil, be thou my good." It is this moral fidelity which, even in the poems of deepest sadness, might be accepted as the presage of that serene morning which breaks upon the later pages. And, further, we quote this passage from Robertson, because our subject inevitably takes our thoughts beyond all literary criticism, into the struggles which to-day are going on in numberless minds, mostly in silence; and to such minds these words, from one who has been through the depths of the struggle and conquered, come home with deepest insight and power:

"It is an awful moment when the soul begins to find that the props on which it has blindly rested so long are, many of them, rotten, and begins to suspect them all; when it begins to feel the nothingness of many of the traditionary opinions which have been received with implicit confidence, and in that horrible insecurity begins also to doubt whether there be anything to believe at all. It is an awful hour,—let him who has passed through it say how awful,—when this life has lost its meaning and

seems shriveled into a span; when the grave appears to be the end of all, human goodness nothing but a name, and the sky above this universe a dead expanse, black with the void from which God himself has disappeared. In that fearful loneliness of spirit, when those who should have been his friends and counselors only frown upon his misgivings, and profanely bid him stifle doubts, which for aught he knows may arise from the fountain of truth itself; to extinguish, as a glare from hell, that which for aught he knows may be light from heaven; and everything seems wrapped in hideous uncertainty,—I know but one way in which a man may come forth from his agony scatheless: it is by holding fast to those things which are certain still,—the grand, simple landmarks of morality. In the darkest hour through which a human soul can pass, whatever else is doubtful, this at least is certain: If there be no God, and no future state, yet, even then, it is better to be generous than selfish, better to be chaste than licentious, better to be true than false, better to be brave than to be a coward. Blessed beyond all earthly blessedness is the man who, in the tempestuous darkness of the soul, has dared to hold fast to these venerable landmarks. Thrice blessed is he who—when all is drear and cheerless within and without, when his teachers terrify him, and his friends shrink from him—has obstinately clung to moral good. Thrice blessed, because *his* night shall pass into clear, bright day. I appeal to the recollection of any man who has passed through that hour of agony, and stood upon the rock at last, the surges stilled below him, and the last cloud drifted from the sky above, with a faith, and hope, and trust no longer traditional, but of his own,—a trust which neither earth nor hell shall shake thenceforth forever."

MADAME BONAPARTE'S LETTERS FROM EUROPE.

FIRST PAPER.

THE romantic marriage of Elizabeth Patterson, of Baltimore, and Jerome Bonaparte, the youngest brother of Napoleon, and the unfortunate termination of that ambitious and ill-starred match, are familiar to most readers. Shamefully deserted by the man who had solemnly sworn to love and protect her forever, and disappointed of the dazzling career which she had fondly anticipated at the imperial court of France, Madame Bonaparte's brave and determined spirit was bruised, but not broken. Foiled in her brilliant schemes, she returned to her father's house, where it would seem she did not receive the welcome of the returned prodigal.

The subsequent career of Madame Bonaparte as a beauty, wit and queen in the first circles of European society has only been vaguely surmised. The recent discovery of her letters, written to her father during this period of her social success—when beauties envied her beauty and wits dreaded her wit,

when kings sought her acquaintance and princes claimed her friendship—will enable us to give to the world the true story of the most brilliant years of this remarkable woman's life. These letters have lain in a lumber-room of the old Patterson mansion on South street, in the city of Baltimore, since the death of William Patterson—the father of Madame Bonaparte—in 1836. A few years since, the old house was pulled down to make way for the opening of German street, and the contents of the garret were sold to a junk dealer for a trifling sum. The junk dealer sold them to a paper dealer, who, fortunately, discovered their value, and instead of sending them to the paper-mill, disposed of them to the present writer. The package was carefully tied with red tape and indorsed "Betsy's Letters." Each letter was also indorsed with the name and date, for Mr. Patterson, one of the merchant princes of Baltimore, was a methodical man of business.

In this correspondence, the three predominant traits of Madame Bonaparte's life are revealed with astonishing distinctness: her ambition, her maternal devotion, and her love of money. Her letters display an amazing knowledge of the world, a keen analysis of men's motives, and an eager pursuit of worldly honors. This Baltimore girl, married at eighteen and deserted at twenty, seems to have possessed the *savoir vivre* of Chesterfield, the cold cynicism of Rochefoucauld, and the practical economy of Franklin. She always addresses her father as "Dear Sir," and shows no affection for any person except her son.

The first letter was written after Jerome had left her, but while there was still doubt whether he would abandon her.

ENGLAND, August 14, 1805.

DEAR SIR:

We have at length concluded on remaining here the winter, but not in London, as my going into public or showing myself would be highly improper. I have received no letters from Bonaparte since he has seen the Emperor—he wrote to me from Madrid and Mont Cenis, which is near Milan, where the Emperor then was; but, on his arrival, his brother refused to see him, and he is now cruising before Genoa. He sent Le Camus from Milan to Amsterdam to meet me, and upon finding I was neither at Amsterdam or Embden, Le Camus refused to leave his letter for me with Robert.* I however have just received a message from Bonaparte as late as 29th of June, that he was as much attached to me as ever—he sent this to me through the medium of some English friends of the Marchioness of Donegal, who reside at Genoa. I suppose he finds it impossible to have a letter conveyed. I request you will not mention a word of my affairs to Mr. O'Donnell;† for, although he would not willingly injure me by telling, yet he is incapable of keeping a secret, and everything that is said the French Minister Turreau will certainly write to France. They have had poor Bentalou‡ in the Temple, but he is liberated; they took from him a letter from you to Bonaparte, and I have never been able to get a single letter sent to him. I am sure, likewise, that Turreau has orders to try to sound you with respect to my consenting to a separation from Bonaparte on certain conditions; but, as we have no reason to suppose that he will ever consent to give me up, we must certainly act as if we supposed him possessed of some principle and honor. Turreau will likewise try to find from you what were his intentions on leaving the United States in case the Emperor would not receive me; but a perfect silence if he sees you or talks of me would be the safest.

We imagine that Bonaparte is in some measure a prisoner, and we must wait patiently to know how he will act; in the meantime, it would be extremely imprudent for me to go out or see any one, and I must avoid getting into any scrapes which I might be led into from thinking that he would desert me.

No matter what I think, it is unjust to condemn until we have some certainty greater than at present, and my conduct shall be such as if I had a perfect reliance on him. I think that by returning to the United States it would seem as if I had yielded the point, and by next spring everything will be decided.

Mr. Monroe* and family are in London and have shown us the greatest civility and kindness. It is of the greatest importance for you to be very guarded with respect to Turreau; for I have every reason to know that they will try to prevail on me to consent to a separation, and if they can get anything from either you or myself like encouragement, they will persuade Bonaparte that we have no objection, provided, etc., etc., etc.

Do not speak of my connection with the Marchioness of Donegal as if it were known that she conveyed a message from Bonaparte to me, or from me to him, which she has promised, she might be brought into trouble, and no one would venture to oblige us again. We received last evening a letter from Garnier† at Genoa; he says that Bonaparte desires me to return to the United States, that he will be absent from me a year or eighteen months, and that he strongly objects to my staying in England, but we think it is a trick of Garnier's, and that Bonaparte knows nothing about the letter,—especially, as we know Garnier to be a villain. The Emperor has offered to give me twelve thousand dollars a year during my life, on condition that I would return to America and give up his name. I request you will not mention this proposal; I have never taken the smallest notice of it. I never talk before any one of the Emperor or any of his family, and one advantage of my staying the winter in this country is, that I escape observation more than in Baltimore, where you know people are always on the watch, and where many stories would be written to France. We received yesterday letters from Mama and Miss Spear,‡ of the 29th of May, they express surprise at me not saying anything about the decree the Emperor had passed to annul my marriage in our letters from Lisbon. But not one of us knew it until Bonaparte had departed, and he was ignorant of it when he left us. You must place no confidence in what the English papers say, as they often publish that I will appear in public, when I am sitting quietly in my room.

I remain, Dear Sir, yours,
E.

In the autumn of 1805, Madame Bonaparte returned to Baltimore, where she resided until the fall of Napoleon at Waterloo, when she visited England and France. While the ex-emperor was dragging out a weary exile at St. Helena, and his family were excluded from France, Madame Bonaparte was reigning in the *salons* of Paris, receiving homage from Wellington, compliments from Talleyrand, and presents from princes.

CHEL TENHAM, August 22, 1815.

DEAR SIR: I have been obliged to remain here owing to indisposition, but shall proceed to Paris when my health will permit me to travel. I have been agreeably surprised at the kind and flattering

* Brother of Madame Bonaparte.

† John O'Donnell, Esq., a wealthy East India merchant in Baltimore, at the beginning of this century.

‡ A French officer who served in the American Revolution.

* James Monroe, afterward President of United States.

† Dr. Garnier, Jerome's physician in America.

‡ Cousin of Madame Bonaparte.

reception which I have received from the most fashionable and elevated ranks of society in this country—nor is there anything left for me to desire except the presence of my American friends to witness the estimation in which I have the happiness to be held. The political state of Europe is still fluctuating. France is a volcano from which occasionally are emitted sparks of fire which threaten alike all parties. Louis XVIII. remains at Paris protected by the combined forces of Europe. Napoleon is gone to St. Helena, but has left behind him a reputation which adversity has not subverted.

Every one wishes me to educate my child in England, and they are good enough to flatter him by saying that Bonaparte talents ought to have English education. He would indeed be much more highly considered in Europe than in America where unfortunately he possesses no rank, and could I combine with the interest he excites here, the solid advantages of a larger fortune, I should be too happy! As a last resort he must be a professional character, and the talent with which nature has so lavishly endowed him might lead him to the highest eminence in Europe. America and its institutions are yet in a state of infancy—nor is there from the commercial complexion of all its pursuits the same field for successful exertion of the kind of mental superiority which your grandson, happily or unhappily, possesses. Splendid intellectual endowments may be a misery or a blessing to their possessor, and everything depends on the method of directing them in early age.* My conduct in leaving America was the result of much previous reflection, nor do I see any reason yet to regret it—on the contrary, my most sanguine expectations have been exceeded.

CHELTENHAM, Sept. 2, 1815.

DEAR SIR:

As to leaving America without the consent of my friends,—it appears to me that, if indeed I have friends there, they would have wished me to come to a country where I am cherished, visited, respected and admired. It appears to me that, if I have friends in America, their friendship might have been shown in some more agreeable mode than finding fault with me for being miserable in a country where I never was appreciated and where I never can be contented. It appears to me natural too that, if I have friends in America,—which I have, I reluctantly confess, sometimes doubted,—that their pride might be gratified in hearing that I am in the first society in Europe; and that too for my personal merits; for without vanity I may say so, since I have neither rank, fortune nor friends of my own, willing to assist or protect me. I acknowledge that the standing I possess in this country is highly flattering, and that it is not surprising I should prefer people of rank and distinction who are willing to notice me,—their attentions are very gratuitous for I am a very poor stranger, and a very unfortunate one on many accounts. Every one who knows me has heard that your wealth is enormous, and consequently they think I shall have a large fortune from you. In Europe a handsome woman who is likely to have a fortune may marry well, but if it gets about that her parents are dissatisfied with her they will think she will get nothing by them, and if she had the beauty of Venus and the talents of Minerva no one will marry her. People here are not such fools as to marry poor beauties, however much they may admire them.

* At this time her son was ten years old.

Your own pride must be interested in having me the object of public esteem and your interest is to have me placed in an elevated situation. As to the opinions of old Mr. Gilmor and other very respectable and worthy persons, that I ought to be in Baltimore, they only tell you so, because they know that their daughters might come here and never be known. Besides they are envious of your fortune and my situation. Look how they run after the poorest sprigs of nobility, and then you will know what they think of my standing in Europe. I am surprised you do not see the advantages of my position, compared with that of the daughters of other people in Baltimore, and that you permit the chattering of envious people to influence you. You well know that the wealth of our family, and the consequence which from many circumstances we possess, must be very disagreeable to others, and small towns are always worse than others in every respect. If people do not approbate my conduct in America what is the reason they paid me so much attention? Ask George* what I was in New York. What other American woman was ever attended to as I have been there? Who ever had better offers? I never would marry without rank, or God knows I might have got money enough by marriage. They are afraid of your supporting me in a rank, and of your sending my child where he will be in one which all their government stock, insurance stock and real property could never put them. Let them come and try which is of most consequence, they or me! I confess that it would have been perhaps a blessing if I could have vegetated as the wife of some respectable man in business; but you know that nature never intended me for obscurity, and that with my disposition and character, I am better as I am.

All my conduct is calculated, but you will undo the effects of my prudence if you write to certain people, who show your letters. Let people think you are proud of me, which indeed you have good reason to be, as I am very prudent and wise.

E. P.

In her next letter she alludes with just pride to the perfect propriety of her conduct which, during a long residence in the most corrupt society, remained untarnished.

CHELTENHAM, September 23, 1815.

DEAR SIR: I every day find new reasons to think we succeed best in strange places, since human infirmity seldom stands the test of close and perpetual communion. Europe more than meets the brilliant and vivid colors in which my imagination had portrayed it. Its resources are infinite, much beyond those which can be offered us in a new country. The reception I am happy to meet in England makes me regret the loss of health which sometimes obliges me to decline brilliant parties. The Portuguese ambassador, Count Tonsall, sent me through Viscount Lord Strangford, late ambassador at the Portuguese court, an invitation to a grand ball given to the nobility of Cheltenham. I left my bed at ten o'clock to go, as my attendance was expected, and at one in the morning I found myself so ill as to be unable to go to the supper table, and to be obliged to return.

My fervent desire of European pleasures was not

* George Patterson, her youngest brother.

the vision of a distempered fancy, it was only a prophetic spirit of the fascinations which here surround existence. The purposes of life are all fulfilled—activity and repose without monotony. Beauty commands homage, talents secure admiration, misfortune meets with respect.

In this country the term *old*, which is so often repeated in America, is completely banished from the polite vocabulary. Women of forty, even fifty, are more cherished and as advantageously married as chits of sixteen. They are not here cheated out of their youth as with us, but retain the glorious privilege of charming until at least sixty. Another advantage too they possess of generally marrying men as young or younger than themselves. Since I am so happy as to be in the best society, I much deplore the absence of American friends to witness the estimation in which I am held. I have taken a house for myself, as the customs of this country do not authorize any person of fashion in remaining at a boarding-house; Lady Falkener has been kind enough to chaperone me, and my house communicates with hers. There is no danger of my committing a single imprudent action—circumspect conduct can alone preserve those distinctions for which I sighed during ten years.

The laureled hero, the sceptered monarch, the subtle statesman, the profound politician, have all been betrayed by the *ignis fatuus* of admiration into ruin and degradation. The situation of a young and beautiful woman has ever been one of peril. Detraction accompanies praise, and the advantages of loveliness are dearly purchased by the pains which envy inflicts.

The Americans begin to excite respect and interest. Their war, so calamitous in its existence, has produced beneficial results. My compatriots enjoy a degree of consideration abroad which was long denied them. They are admitted by their proud enemy into the scale of nations. American institutions, government, manners, climate, etc., etc., have become the subject of inquiry and concern. I feel some little complacency in pronouncing myself an individual of a country which every one seems to think will one day be great. I contribute my mite of applause to the valor of its defenders, and the wisdoms of its councils. *Vive la Patrie!* I exaggerate when I descant on its amusements, since whatever may be the great destinies which Baltimore may develop, its pleasures have not yet dawned. Patriotism induces me to draw a veil over the defects of my country; and policy as well as fashion dictate patriotic feelings. The British are, as they modestly confess, the greatest nation in the world. We must acknowledge that their monstrous vanity is excusable when we know that their gold, their armies, and their councils have successfully directed the efforts of combined Europe against the man whose talents menaced their existence. He was the object of their admiration and dread, and they have in him subverted the glory, the existence of France as a nation. They do not in England pretend to revile Napoleon, as some persons in America have done. His stupendous abilities are admitted—his misfortunes almost respected by his enemies. I listen silently to any discussion in which he bears a part. I easily perceive that he has more justice done him here than with us.

Adieu, dear sir, yours affectionately, E. B.

Madame Bonaparte was now in Paris, for whose gayety she had sighed for ten years. She always detested Baltimore, and seemed

to liken herself, while there, to a grain of wheat hid in a bushel of chaff.

PARIS, 22 February, 1816.

DEAR SIR: I have received your letters by Triplicata. As all mine are liable to be opened and published, I wish you would have the goodness to avoid mentioning such things as you have done. I am really pained at your sentiments respecting the course I have pursued. It is the only one which can make me happy, and was adopted after the experience and reflection of my whole life. I am not half as foolish as you imagine, or I should, perhaps, have been more contented. There is but one single chance of securing tranquility for the future years which I may have to live, that is to remain in Europe. I can never be satisfied in America. It was always my misfortune to be unfitted for the modes of existence there, nor can I return to them without a sacrifice of all I value on earth. I have everything necessary to my complete success except money. I possess the means of commanding everything else. I preserve amidst the corruption, the pleasures, the liberty of Paris, the most irreproachable conduct. I have the courage to submit to every privation when a departure from the strictest propriety is required. I form no plans, I try to hope that some unexpected happiness may continue me where alone I attach value to existence. The Ex-King of Westphalia is now living at the court of Würtemberg. He has a large fortune, and is too mean to support his own son. He ought to pay you your money.

I remain, sir, affectionately yours,
E. Etc, etc.

Notwithstanding Madame Bonaparte's repeated declarations that she could not be happy in America, she returned to her native city of Baltimore, where she remained until the first of May, 1819, when, with her son, she again sailed for Europe, and after a tedious voyage of seven weeks arrived at Amsterdam on the 25th of June, whence they started in a private conveyance for Geneva, where Jerome was to continue his education. The expenses of the journey, amounting to seventy-five guineas, were duly reported by Jerome to his grandfather, Mr. Patterson. Immediately upon their arrival in Geneva, Madame Bonaparte became the recipient of attentions from the most distinguished people who were residing at the time in that city. Among others were the stepson of the Duke of Kent (father of Queen Victoria), the Princess Potempkin of one of the oldest families in Russia, Princess Galitzen, and Prince Demidoff, then the wealthiest noble in Europe, whose ancestor was originally a Russian serf who fled from his native village to avoid conscription, and laid the foundation of his immense fortune by the manufacture of arms during the reign of Peter the Great.

In the spring of 1820, the Princess Borghese signified through Mr. John Jacob

Astor her desire that Madame Bonaparte and her son should visit her at Rome, and her wish to make some provision for the latter. Madame Bonaparte wrote to the princess, expressing her appreciation of the invitation and saying that she was unwilling to interrupt Jerome's education.

On 23d of April, Mr. Astor wrote to Madame Bonaparte from Florence as follows:

Your letter to the Princess* I received at Rome and gave it to her myself; the day after she sent a friend to me to inquire about your circumstances. I told her what I thought was the case, that your father is very wealthy, but that his property consisted chiefly in houses and lands which at present did not produce much; that he has a large family, say seven besides yourself, and that I believed you had to economize to educate your son. I was then asked whether you did not receive anything from the King of Westphalia. I said I was pretty sure you never received a dollar from him. Then the Emperor was mentioned. I said I knew that he once made some provision, but that it had long been withdrawn. The result was that the person did not know what the Princess would do, and you know I had no right to inquire farther. My own opinion is that she feels an interest in your son, and I suppose that under certain circumstances would do something for him. I presume she would wish to have him, but I give it as my opinion that at present you would not give him up to any one.

She has your letter. I think you will do well to depend on yourself and keep your son steady to his education. She was quite unwell when I left Rome, so much so that I could not see her to take leave. Your son will have sense enough not to be flattered with prospects which may prove vain.

JOHN JACOB ASTOR.

10 April, 1820.

DEAR SIR: *

Two weeks ago I received a letter from Mr. Astor of New York, who spent a month last summer in the same boarding-house with me in this country, which he left for Italy in the autumn. His letter, dated Rome, 15th of March, contains: "Last evening we had the honor of an introduction to the Princess B—, who immediately inquired after you and your son. When I informed her that I had left you at Geneva, she expressed much regret at your not having made the journey with us. She then said: 'I am very happy to find an opportunity of speaking frankly to you. I wish very much to see Madame P. and her son here. I have spoken to Mr. Russell and Commodore Stuard [*sic*]; both promised me to speak and write to Mrs. P—, but as yet I have no account of them or her. My object is to make some provision for the son of my brother, who is poor and can give him nothing. I am rich and have no child, and find in myself every disposition to do everything for him.' She requested me to write you without delay in her name to invite you to make her a visit and to bring your son."

Having never heard either from Russel or Stuard—your letter of 26 February not having reached

me, nor that to which you allude as having sent some days previously directed to the care of Vanbagan, Parker & Dixon (the latter not now arrived)—I wrote the following letter to the Princess, copy of which I inclose to you. I made every inquiry concerning her circumstances, disposition, and mode of life. She has, perhaps, some fortune of her own. Her husband has been compelled to make her an allowance (which, I presume, is only for her life). They are separated, but not divorced. She is about thirty-seven years of age, the handsomest woman in Europe of her age, excessively luxurious, consequently expensive in her habits, said to be extremely capricious in her attachments. They are a sort of state prisoners who can move only with the permission of the sovereigns of Europe, and the wife of Joseph was refused permission to inhabit her château in Switzerland last summer. My opinion is that I should go to the Princess myself in the autumn for three months, that Cricket should be left at his present boarding-school, as his education is the only certain fortune which I can calculate on for him, that he should remain ignorant of the expectations which are held out to him and on which I think there is no reliance to be placed, until he has acquired sufficient instruction to enable him to pursue some useful and honorable occupation in life.

The desire of the Princess for my residence with her offers many advantages and disadvantages. Rome is a delightful place, she occupies a superb palace, receives the homage of all strangers of distinction; pleasure is the sole pursuit in Italy, her modes of existence are magnificent; although capricious and spoiled by adulation, which in a beautiful woman and a princess is very natural, they say she is good *au fond*. I should prefer Rome to Geneva, a palace to my apartment, strangers of distinction to my present resources, pleasure to work, elegance to economy, my liberty to all these attractions and the interests of my child to every other consideration. I expect her answer to my letter which will decide my departure. I shall remain three months near her; my object is to judge by my own eyes and ears, to engage a continuation of her present friendship for the child, and to convince her of the necessity of letting him pursue his education here for three or four years.

I cannot consistently with my ideas of propriety expose my son to the danger of losing his time in a country where amusement is the sole pursuit. Three years will produce great changes. It is not prudent for him to change his place of residence at the present moment; if he joins them, he will be obliged to share their captivity—at present he is considered as entirely separated from their destinies, which are very fluctuating and completely under the dominion of others. My resolution is uninfluenced by personal feelings, never having felt the least resentment toward any individual of that family, who certainly injured me, but not from motives which could offend me—I was sacrificed to political considerations, not to the gratification of bad feelings, and under the pressure of insupportable disappointment became not unjust.

Adieu, sir.
Yours affectionately,
E.

25 April, 1820.

DEAR SIR: *

I am desirous to profit by every remote chance of wealth for him and at the same time conscious that a good education is the only certain advantage I can command for him. I wish to make him ac-

* Pauline Bonaparte, wife of Prince Borghese, of Rome.

quainted with the old lady, of whom, by the way, I have heard nothing, and if I take him there it will not be in my power perhaps to bring him here again, as none of that family are allowed to come here, and once received by them he will be considered as one of them. The French Chargé, at Amsterdam, refused me a passport for him to travel through France, which would have been a shorter route to this place: he said his resemblance to the Emperor was so striking that it would expose me to great inconvenience in that country, and that he could not accord him a passport without first stating this fact to the government and obtaining their decision.

The fact is my task is no easy one; this child has more conversation and better manners, a more graceful presentation, than other children of his age, consequently he excites more attention, and I am constantly tormented with the fear of seeing him spoiled by the compliments paid him in society of which if I compel him to abandon he will lose the ease and habits of politeness so difficult to acquire at a later period. He has grown taller and much better looking; he is thought very handsome, but I do not myself think him by any means a beauty and regret that others tell him so, as it is a kind of praise which never made any one better or happier. I do not think there is any confidence to be placed in expectations from his father's family; they are less wealthy than reported to be. I have seen a person who lived years with the mother, who, she says, is a woman of sense and great fortitude, that her fortune cannot be immense, as, although a great economist, she was obliged to spend great part of her income.

The King of W. spends everything he can get hold of and will keep up kingly state until his expended means leave him a beggar. He has never taken the slightest notice of his son, and is said to be as extravagant and thoughtless as he was fifteen years ago. He buys houses and then leaves them, and is less popular than any of his family.

There is certainly no doubt of the policy of my keeping the child on the best possible terms with them; one can lose nothing by that. I shall write and act as if I firmly believed there was something to expect, although I confess I am not sanguine on the subject, distrusting all good which I do not find perceptible to the touch.

There is a son of Sir Robert and Lady Wilmot going out with the British Ambassador. I have given him a letter to Robert Gilmore. I know his mother and father, to whom I gave the letter here, not knowing the young man. If you should be giving a family dinner you might invite him; but I do not advise people to take any trouble about strangers, as they are very ungrateful in general, and their acquaintance of no great advantage unless one has daughters to get rid of.

Adieu, sir.

Yours affectionately.

GENEVA, May 8, 1820.

DEAR Sir:

Lady Morgan arrived here a few days since. She left Rome the first of April; was very intimate with the Princess whilst there, who spoke to her of her desire to see us in Rome, but did not mention any intention of either offering her house or making any provision for Bo. She desired Lady Morgan to write to me to come there, and expressed her interest in us. Lady Morgan describes her extravagance as boundless. She keeps up the state of a queen, and is not at all to be relied on, as she is

perfectly capricious, and will spend her whole fortune before a great while, and perhaps much more than her own. Lady M. says I would be mad to take the child there; that his education would be sacrificed; that he would adopt the most absurd ideas of his own greatness, as they all call themselves Majesty and Highness, and expect to return to France as they were formerly; that there is not the least dependence to be placed on her promises, which she makes to get us there, because she hates the Queen of W. and her brother Jerome, who have both behaved very unfeelingly to the family since their dethronement, whom they seem now anxious to cut, and have ceased all correspondence with them.

She says the old lady has sense and dignity; that if she had promised she would place greater confidence, but that she said nothing on the subject, and that it is more than probable she will have very little to leave. * * * She told Lady M. that she had heard that I was like her, and asked her if she saw the resemblance. Lady M. is one of the shrewdest women in Europe, and her opinion is perfectly to be relied on. She knows the value of money as well as any one, and when it is worth while to put oneself in the way of getting it. She thinks the Princess would like to have Bo with her to provoke the Queen of W., but she is firmly of opinion that he would be ruined for every purpose of life if taken to her, and that he should be kept where he is, if it is intended that he should pursue a profession as a maintenance, that there is nothing to expect from the Princess or any of them.

Joseph is the only certain fortune; they all have children except the Princess, who has a life income in her husband's estate.

Yours affectionately.

GENEVA, May 22, 1821.

DEAR Sir: I beg you to do me the favor of sending the inclosed to the Count de Surveilliers. * It is an answer to his proposal of my inhabiting his château in Switzerland. He gives me the choice of three furnished country-houses, and an order to that effect to his agent here. I cannot however accept either; they are too far from town for me, who have no carriage, and I should be melancholy without society. He has been very friendly, and from what Mrs. Toussard writes me, he appears disposed to acknowledge and be fond of Bo. I have not been in Italy, nor do I propose taking the child, having seen at once that it would have been his ruin. I have had a letter from his father, in which he informs me that his fortune is not sufficient to provide for his present family, who will be taken care of by their mother; that I might have known his character too well to suppose he ever thought of laying by a fortune; and that the little he did save he has been cheated out of by the persons he trusted. I believe he is not as bad-hearted as many people think, and that many of his faults and much of his bad conduct proceed from extravagance and folly, which are indeed the source of all evil, both to their possessors and to those about them.

I am, dear sir, yours affectionately,

E. P.

The Prince and Princess of Würtemberg are here, have invited me to see them, and particularly requested Bo should be presented to them. The Prince is brother to the late King, and uncle to the

* Joseph Bonaparte, ex-King of Spain, who assumed this title after the fall of Napoleon.

ex-Queen of Westphalia. He expressed his surprise at his resemblance to the Emperor, which is remarked by every one that sees him.

Please have the inclosed letter put in an envelope and addressed to the Count, it not being respectful to send a single sheet of paper to a person of his rank; and the postage is too dear to allow me to make this package larger for Amsterdam.

GENEVA, September 19, 1821.

DEAR SIR:

I am fully aware of the little reliance to be placed on either promises or expectations from the B—— family. They are prodigal of professions in proportion as they are sparing in actions of generosity. Their habits of expense make it impossible for them to provide for the wants of others, but as they say kind things, it is but fair they should be answered in the same way. We reciprocate by all opportunities kind wishes on their part and grateful expressions of mine—there can be nothing lost by this mutual expenditure of words, because I am too clear sighted to be the dupe of ill-founded hopes. I have not changed in a single instance my plans. The offer of the house was something like reality of kindness. The Count passes in the estimation of the world for being possessed of greater wealth, consistency of character and prudence than the others. The old lady, to do her justice, promises nothing more than she gives. She is said to be avaricious, which, I suppose, means that she does not spend more than her income. Whatever may be her means, she has immediately around her a number of helpless, extravagant relations to consume her fortune whenever she leaves it.

I am, dear sir, yours truly,

E. P.

GENEVA, October 16, 1821.

DEAR SIR: I have resolved by the advice of many persons to spend this winter at Rome and to take Bo with me. I confess my own opinion is, that this step will avail him nothing, unless it be the conviction that there is nothing to be expected from any one but himself, and that his success in the world must ultimately depend on his own exertions.

My desire was to defer this experiment until he was two years older, but as the old lady and the Princess may not live so long, it has been urged to me, that I was allowing an occasion to escape, which might be irrecoverable hereafter.

I can only add, that I am grateful to the kind Providence which withheld from me the care of a larger family, and amidst all the trials and disappointments which have fallen to my share I take comfort to myself that I have only one child. I do believe that it is impossible to give children sufficient ideas of the necessity of economy and industry, when parents are not in absolute want, and that it is only when they are reared in the midst of privation and starvation that they can be made to comprehend the folly of spending time and money on trifles.

I have taken three seats in a carriage which contains six passengers. The terms are fifteen Louis d'or each person hence to Rome, found by the driver for this sum in a seat and two meals per day, bed at night, and fire if wanted. I pay seven Louis d'or only for the maid, who sits on the box with the coachman. We must, however, pay something at the inns to servants, and at least three Louis to the coachman if content with him on our arrival, besides paying for the days we may desire to spend at large towns on the way. This bargain is said to be one

of the best that has been made here, but I find it quite dear enough.

Yours affectionately,

E. P.

Bo has grown very tall, and I am persuaded he is quite as industrious and promising as other children of his age, but the solicitude and care of a parent are much greater than any common success can ever repay.

ROME, 28 November, 1821.

DEAR SIR:

The Princess B. had heard from Florence that I was on my way to Rome. She wrote me a note, expressing her desire to see me instantly on my arrival, sent it to all the hotels in Rome, where I was not to be found, having taken rooms in a private house, until, an American paying her a morning visit, she discovered my address. I answered her note by asking the hour her Highness would be pleased to receive me. She immediately sent her lady of honor in her carriage to convey me to the Palace, since which I have been there every day.

I have waited on Madame [*Mère*], after her expressed desire that I should. They have all been very kind. The Princess has presented me with an elegant ball-dress, a pink satin cloak, and a bonnet. She has new-dressed Bo even to his flannel jacket, and has promised to allow him two thousand francs, or four hundred dollars annually to dress himself until he marries, when the pension will cease, and she will give him a capital of forty thousand francs, or eight thousand dollars.

She and Madame wish Joseph to marry him to his youngest daughter, now in America, in which event the Princess would leave something to him at her death. She has written this to her brother, and if he likes the match she wishes me to take the child out, and to return to live in Rome myself for company for her.

They are all pleased with Bo. I shall be directed by circumstances, which are very mutable in this life. The marriage, I know, was desired by Joseph, who wrote it to the Princess. She answered that she desired one between the son of Lucien and Joseph's daughter, now in America. Since our arrival she is still more anxious that my son should be the person chosen instead of Lucien's son, which some [time] ago she had desired. She has written her preference of my son, but whether Joseph will choose him I know not. Madame, knowing the state of Jerome's finances and the impossibility of his ever doing anything for any one, wishes Joseph to provide for this child by a marriage. I have given my consent and promise that he shall remain with Joseph wherever he may be, but will not incur the expense of a sea-voyage unless Joseph writes me positively his intentions. This I have stated, as well as the impossibility of my giving any money, my income being with great economy barely sufficient for my own maintenance.

Yours truly, dear sir.

Bo feels the propriety of doing what I please on the subject of the marriage, and has no foolish ideas of disposing of himself, in the way young people do in America.

I have taken rooms in Rome, where everything is horridly dear, ten guineas per month. I find there is great scarcity of money in all places and all families, and the great expectations and chatterings of travelers are exactly what I always supposed, nothing but smoke. I am very glad I came here. They have received us extremely well, and at all events I have done my duty, which is all we can do

in this world, where no one is for his pleasure, and where events baffle all schemes of prudence. No one can command success; wisdom consists in profiting by lucky chances.

If the marriage is offered I mean to accept it, and as things go in the generalities of families, shall esteem myself fortunate in being able to dispose of my son according to my views, instead of his choosing before his judgment is matured, and probably encumbering himself for life with a poor wife and clamorous offspring. Marriage ought never to be entered into for any other purpose than comfort, and there is none without consequence and fortune; without these it is more prudent to live single.

ROME, Dec. 21, 1821.

DEAR SIR: Bo has been well received by his family; his grandmother and his aunt have written to the Count their desire to marry him immediately to his daughter now in America, and have asked me to take him in the spring, if the Count still perseveres in wishing this connexion which I know he did some time ago. I have told the P—— that I have no money to give, and as his uncle is so rich I imagine there will be no question of getting anything with the boy. It cannot be expected that I should rob myself, and as it is their wish to keep up the name through him, they will arrange matters to support him. There is one thing however which must be insisted upon, in the event of her death before his, part of her fortune must be his. I cannot expose him to the inconvenience of contracting expensive habits, losing his education by marrying at this time too, without some certain support, if he should be left a widower. This point must be stipulated, and if my health should not allow me to accompany Bo in the spring, I must request you to act in my place. I shall write you particularly to this effect when we receive the Count's answer to his mother's and sister's letters. I forwarded him two through France from the Princess immediately after my having seen the ladies. * * I am rejoiced at having brought him here, although I feared the experiment might prove a dangerous one. At all events there will be no loss except of a few months from his education. * * I wait the arrival of the Count's letters, but shall not be surprised at a failure of the affair. For this life there is nothing but disappointment. The happiest are those who support misfortune best.

I remain, dear sir, yours affectionately,
E. P.

ROME, 8th January, 1822.

DEAR SIR: I have already written you an account of our arrival and reception here. Bo has been received very affectionately by his relations. His aunt allows him a dollar a day to dress himself. * * The grandmother is said to be rich; we may, however, make allowances for an exaggeration of one-half. She lives in great splendor, and with great economy; her principal expense being the interest of her palace and furniture,—a palace here is worth about thirty thousand dollars the first purchase. She is very kind to Bo. He goes to see her every day. She gave him forty guineas to buy a horse, but as there was no allowance for his keep, I persuaded Bo to hire one by the month. The fact is her own children are always wanting money from her, which perhaps accounts for her relying on my income to maintain her grandson, which appears to be the intention of all his family also. His father, they all say, is ruined, therefore it is vain to expect anything from him. I do indeed

regret that there is no one of the whole connexion rich enough to allow me twelve hundred dollars a year for Bo's maintenance. He dines with them, rides with them, goes to their boxes at the theater, and they seem very much pleased with him. He has resumed his family name, which piece of vanity may give me some trouble about his passports. I am glad I brought him because I like to know that nothing has been lost by not coming after it. * * I am now curious to know Joseph's answer to the ladies' written desire of a marriage.

I can only say I have spent my time and money on this boy. I shall give nothing more until my death. They do not expect me to do anything, as I have been at the whole expense of his education. I shall not be at all surprised if Joseph has changed his mind too by this time.

I am, dear sir, yours affectionately,
E—

They expect the K. W. and his wife here on a visit to his mother. I fancy he is coming to get money out of her. The family are all like other families. * * I shall not see the K. W., nor would he like it himself, after the unhandsome way in which he has always conducted himself. I shall hold my tongue, which is all I can possibly do for him.

In order to further the scheme for the marriage of her son to Joseph's daughter, Jerome was dispatched to America that he might be on hand.

ROME, 29-30 January, 1822.

DEAR SIR: Jerome sails in the *White Oak*, to leave Leghorn the 14th or 20th of February. His grandmother, who has been very kind to him, his Uncle Louis and the Cardinal, all advise me to lose no time in sending him to his Uncle Joseph. The Princess, after having been consulted the first person, and having approved highly the project of embarking him, has since changed her mind now that his passage is engaged and every preparation made for sending him. If Joseph should continue to desire the marriage it will be one that all the family desire, and the only probable way of ever getting anything like pecuniary aid for the boy from any of the family. Madame is most anxious for the match; I do not think it absolutely necessary for me to go out, as I should think you might do everything I could do. The principal and only thing is to see that he will not be left without any provision if she dies before him, or that he will not be entirely dependent on her as long as she lives. They tell me here, Joseph means to give a hundred thousand dollars on the marriage. If he does not secure the whole or any part to her, there is nothing to be said, as the money becomes her husband's. But if he means to tie it up, I wish at least fifty thousand to be settled on my son. There is no knowing how marriages may turn out—women may treat husbands ill, leave them, die before them, but if a good provision be made for the husband, there is nothing lost by risking a marriage.

If Joseph desires to have him in Philadelphia with him, of course it is better to let him stay with him as much as possible. His daughters are the best matches in Europe—in point of both money and connection. They will have at least five hundred thousand dollars from him each and something besides from their mother. They are the nieces of the Queen of Sweden. The family are so anxious for my son's marriage—Madame has refused to acknowledge the marriage of Lucien's daughter with

an Englishman on account of the inferiority of his birth. She would never forgive my son's marrying any woman but of high rank.

I will never consent to his marrying any one but a person of great wealth. He knows I can only recognize a marriage of ambition and interest, and that his name and rank require it.

I refer you to Bo for the history of his aunt, the P—. She has treated him exactly as she has done all her other nephews, that is, promised and then retracted. She makes a new will every day and has quarreled with every human being on earth, and will finally leave her property to strangers. All that has been said of her is not half what she de-

serves,—neither hopes of legacies nor any expectation can make any one support her whims, which are so extraordinary as to make it impossible not to believe her mad.

I certainly regret being separated from Bo, but parents must let their children live where their interest or taste leads them. All is sacrifice on their part. I do not expect my poor child to live where I do, although his society would be a great comfort to me. If the marriage takes place, he must live with his uncle in America. My health, and the taste I have for European society, render it quite impossible for me to live near them, as probably they will continue in Philadelphia.

(To be continued.)

EDISON AND HIS INVENTIONS. I.*

THE ELECTRO-MOTOGRAPH AND ITS APPLICATIONS.

NOTHING can better illustrate the rapidity and intensity of life in the latter half of the nineteenth century than the impatience with which the American press and public have awaited the result of Mr. Edison's experiments with the electric light. The daughter of the horse-leech would contemplate with surprise the importunity with which it is demanded of an inventor that within a few months he shall turn the current of a subtle force into commercial channels, constructing and giving to the public a new illuminator requiring profound experiment and the most complicated mechanism. "What they have done," says Emerson of men of action, "commits and enforces them to do the same again;" and to this great public demand Mr. Edison's high standard of achievement has made him forever amenable. That in the case of the electric light he has not disappointed popular expectation, is perhaps not the greatest, but only the most immediately tangible, exhibition of his wonderful genius. In the present and following papers it is proposed to make observation, in detail, of the singular and interesting methods which characterize Mr. Edison's work, as exhibited by his many inventions—including not only those already well known (with the latest improvements made by the inventor up to the date of going to press), but also a number of minor importance as yet unannounced and unapplied—the incidental results of the superfluous activity of a great scientific mind.

Until within a comparatively recent time

there existed great misconception of the character and surroundings of the inventor of the telephone, quadruplex, tasimeter, phonograph and the many other marvels of science. Like a newly discovered Eldorado, his seemingly inexhaustible store of wonders made him the theme of every tongue, and when one person suddenly becomes the object of general observation, Mr. Edison speedily became one of the best known but least understood of men. Perhaps no better illustration of this misconception could be given than that afforded by the press throughout this country and Europe, about the time when the phonograph, with its strange powers and properties, was given to the world. The newspaper press—animated by the same intense interest that moved the public at large, to learn more of the man who could perform such startling scientific feats—eagerly seized every story relating to the great inventor. But the material soon ran short; and then, under the plea that necessity is the mother of invention, industrious *littérateurs* began the work of drawing upon their imaginations. The hero of their labors assumed all sorts of forms. Now he was a scientific hermit, shut up in a cavern in a small New Jersey village, holding little or no intercourse with the outside world, working like an alchemist of old in the dead of night, with musty books and curious chemicals, and having for his immediate companions persons as weird and mysterious as himself. Again, he was a rollicking, careless person, highly gifted in matters scientific but deplorably ignorant in

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everything else,—a sort of scientific Blind Tom. Especially was he accredited with the most revolutionary ideas concerning nature. One Western journal represented him as predicting a complete overthrow of nearly all the established laws of nature; water was no longer to seek its level; the earth was speedily to assume new and startling functions in the universe; everything that had been learned concerning the character of the atmosphere was based on error; the sun itself was to be drawn upon in ways that are dark, and to be made subsidiary to innumerable tricks that are vain;—in short, all nature was to be upset.

Time, however, has in a large measure rectified all this misconception. Edison is no longer the *ignis fatuus* of science that he once was; the leading physicists of the world to day know the details of his laboratory almost as thoroughly as they know their own; his methods and systems are no longer veiled in mystery; his character and genius are understood the world over, and his correspondents may be found among the leaders of science in London, Paris, Dublin, Berlin, Vienna and St. Petersburg.

EDISON IN THE LABORATORY.

BEFORE entering into any detailed description of Mr. Edison's latest invention,—the electro-motograph,—which more particularly is the subject of this paper, it may not be uninteresting to take a brief glance at the surroundings of the inventor and his methods of working.

The laboratory of Mr. Edison, at Menlo Park, N. J., till within a few months, consisted of an unpretentious-looking two-story wooden building, painted white. Here the majority of his great inventions first saw light; although his quadruplex telegraph, stock-printer, and other important inventions had been perfected in his former laboratory in Newark, N. J. But the inventor was so much inconvenienced for want of room, that he has lately built a commodious structure of brick, into which has been removed all the heavy machinery. The old laboratory is now used entirely for chemical experiments. On its second floor the choicest work of the inventor is performed. Here, every day and night, surrounded by hundreds of vials of chemicals and scores of curious scientific instruments, he may be seen in his suit of blue flannel, camelion-like with spots of acid, advising, consulting, and directing his

principal assistant, Mr. Charles Batchelor, his mathematician, Mr. Francis R. Upton, and his chief machinist, Mr. John Kruza. Here are steam baths, retorts, vacuum pumps, hydraulic presses, smelting furnaces, and the various other necessary appliances.

The library of the great inventor is a compendium of the most approved works on science, and consists of nearly 2,000 volumes. A glance at the books well illustrates the character of their owner. Hundreds of them bear copious marginal notes, approving, correcting, or modifying propositions in the text, showing that their contents have been carefully read. Here we see a note to the effect that a certain statement made in the book is erroneous; or we may find a marginal explanation showing how a certain result, declared impossible of accomplishment by the writer of the book, may be obtained. The rapidity with which Mr. Edison peruses a book is remarkable. He seems to comprehend the entire contents of a page at a glance. Question him months afterward on any particular portion of the book read by him, and he will readily give all the salient features of the passages referred to.

The inventor's private office is in charge of Mr. S. L. Griffin, his private secretary, who manages the business affairs of the establishment and attends to the large correspondence. The letters received frequently number as many as 150 a day. They come from all quarters of the globe, and are in nearly every language. With French, German, Italian or Spanish epistles there is not much difficulty; but sometimes a letter comes from a Russian or a Turk, and then Mr. Griffin is put to his wits' ends to get it translated.

On the secretary's right is a large case containing about 800 pasteboard boxes, appropriately labeled with such inscriptions as "Sextuplex," "Phonograph—France," "Electric pen—South America," "Telephone—Australia," "New Zealand Correspondence," "Megaphone," etc. The patents and caveats of the inventor, which now (April, 1879) number 271, are inclosed in large wooden chests. Large volumes labeled "Experimental Researches" contain the drawings and specifications of all of Mr. Edison's inventions, together with the diagrams and descriptions of all the experiments and experimental apparatus leading to the same. Other books are kept which show the result of all experiments made by the inventor's assistants in pursuance of his instructions.

It is the duty of every person in the laboratory who is given a particular task, outside the ordinary routine, to note down the various steps in his progress, and especially to mention any phenomena he may have noticed while so working which he did not understand. By this system Mr. Edison is daily enabled to supervise every experiment made, rejecting such as were unsuccessful, correcting mistakes, and making practical application of such as meet his approbation. When it is known that thirty persons are employed in the laboratory, the untiring industry necessary to attend to all these matters can readily be comprehended. Probably no one of his assistants works so hard as Mr. Edison himself. Every morning at ten o'clock he is in the laboratory giving directions and listening to reports, and he may be found at work until near midnight every night with an intensity of interest and a continuous perseverance rarely seen.

THE PRINCIPLES OF THE ELECTRO-MOTOGRAPH.

THE latest achievement of Mr. Edison is the electro-motograph, a brief explanation of which was made in the May number of this magazine. Although it is yet in its infancy, the scope of its utility has already become far more extensive than that of any of Mr. Edison's previous inventions. Probably its most striking feature is its paradoxical power of making the human hand talk; for the hand revolves a little cylinder, and the instrument speaks as it is bidden, and when the hand stops turning, the instrument ceases to speak. At a superficial glance, this principle would seem to be the same as that of the phonograph; but in point of fact there is no essential similarity between the two inventions; they are used for entirely different purposes, and are governed by separate and distinct laws. The phonograph records and preserves the waves of sound; the electro-motograph—or, as it is called when used in connection with acoustics, the "chemical telephone"—records nothing. In the phonograph, the main principle is the indentation of tin-foil on a cylinder, by a small needle attached to a diaphragm, which is set in motion by the waves of sound. In the chemical telephone there is likewise a cylinder and a diaphragm; but with these its resemblance to the phonograph ceases. On the cylinder of the chemical telephone rests a metal arm attached to a

diaphragm, and the passage of electric waves through such cylinder causes the vibration of the diaphragm, as will be more fully explained farther on. The scientific principle involved in the electro-motograph discovery is diametrically opposite to the main principle in electro-magnetism, and yet it performs in most cases exactly the same functions as electro-magnetism.

In all contrivances hitherto used for producing a mechanical movement at a long distance, the agency employed has been electro-magnetism. Take for illustration the ordinary Morse telegraph. This, as every school-boy knows, consists in the rough of a piece of soft iron around which is coiled a continuous fine wire, through which wire is passed, so to speak, a current of electricity. This current magnetizes the piece of soft iron, which thereupon is enabled to attract a second piece of iron or armature. Here, then, we have a mechanical movement, produced by energy transmitted from a distance. By means of the discovery of the principles of the electro-motograph, Mr. Edison has made it possible to produce mechanical movements at a distance without the employment of electro-magnetism. In other words, had the inventor of the telegraph never lived, and had electro-magnetism never been discovered, we might to-day accomplish the same results by means of the electro-motograph.

THE ORIGIN AND DEVELOPMENT OF THE ELECTRO-MOTOGRAPH.

THE discovery of the electro-motograph has not been the work of a day or of a year, but of six years of study and research. The germ first appeared in the year 1873, while Mr. Edison was deeply engaged in the subject of chemical telegraphy or communication at a distance by electrical discoloration of chemically prepared paper. One day, as he sat pondering over his work, he happened to take in his hand the metallic point through which, as it rested on the chemically prepared paper, the current was wont to pass. When again he closed the circuit to let the current through the paper, he held the metallic point loosely in his fingers, at the same time unintentionally allowing it to rest on the paper. His taking the metallic point in his hand was simply a change from his customary method of experimenting on the subject then under consideration. He expected no result different from that which he had previously noticed and he

was therefore not a little surprised to see that every time he moved the metallic point along the paper (thus closing the electric circuit) the surface of the paper along which the point moved seemed to become exceedingly smooth. Fig. 1 represents the metallic point held in the inventor's hand and resting on the strip of chemically prepared paper.

It is one of the inventor's chief characteristics to investigate the cause of all

endeavor to solve the mystery, he laid the subject aside and resumed work on the line of inquiry on which he had been engaged when the phenomenon first attracted his attention.

But he had not altogether given up the idea of fathoming the problem. Relinquishment for the time being was made necessary by reason of his other scientific engagements; but a curious note was made in his book of experimental researches.

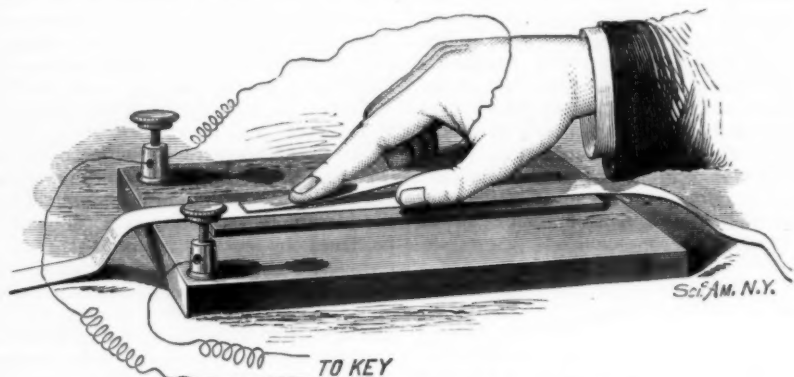


FIG. 1.—THE FIRST STAGE OF THE ELECTRO-MOTOGRAPH DISCOVERY.

actions he does not thoroughly understand. The most trifling deviation from established results at once commands his attention, and often he will depart for weeks at a time from the main line of experiment to ascertain the hidden reason why a certain electric impulse produced a result to-day which it did not produce under like circumstances yesterday. Sometimes these departures have resulted in important discoveries, completely overshadowing the result originally sought, as, for instance, the carbon button; while at other times he has been compelled, after weeks of study and the expenditure of perhaps thousands of dollars in experimenting, to return disappointed to the point from which he started.

On the present occasion Mr. Edison resorted to his customary practice, and for hours experimented with the metallic point. When he arose from his seat, he had established the following rule: "The passage of the electric current through this chemically prepared paper quite materially lessens the friction between the metallic point and the paper." The following day he resumed experimenting, but to his surprise the results of the previous day seemed unattainable. After spending several hours in fruitless

Not long afterward Mr. Edison had occasion to make certain experiments in chemical telegraphy on a short or local circuit, in the progress of which he again noticed the peculiar effect of the current upon the frictional properties of the paper. It was on this occasion that the inventor conceived the plan of utilizing the discovery; but, as a preliminary measure, he set about ascertaining the reason why the electric current produced the effect it did. His investigations, however, proceeded slowly, for other matters of more immediate necessity engrossed his attention. Nothing further of consequence in the embryo electro-motograph seems to have been done until the following year (1874), when Mr. Edison called the attention of some scientific friends to the discovery. A few months later he devised an apparatus to exhibit the phenomenon, and permitted a description of the same to be published in the "Scientific American." Shortly afterward the apparatus was exhibited at a *soirée* of the Royal Society in London, where, according to the newspapers of the day, it was the object of more interest and comment than any other of the large number of scientific apparatus under inspection. After this Mr. Edison

made frequent attempts to discover the first cause of the phenomenon, but without success. The results attained in his experimenting varied at different times in a manner quite unaccountable. Sometimes they were satisfactory up to a certain point, while, again, the most diligent efforts proved failures; and so it came to pass that the incipient electro-motograph was once more placed upon the list of "unfinished inventions." Two years went by and still the invention slumbered. Mr. Edison's researches in chemical telegraphy had long been completed, and nothing occurred to call to life the almost forgotten discovery of 1873. In the summer of 1876, while engaged in perfecting his speaking and musical telephone, the idea suddenly occurred to him that possibly the long-neglected discovery might be made available for the reproduction of musical sounds. The thought was an opportune one; and after a little experimenting the discovery became a valuable acquisition to musical telephony. Notes were reproduced with increased volume. Its mode of application was as follows: A large sounding-board has in its center a spring connected with the telegraph line. This spring rests upon a strip of continuous paper moistened with a chemical solution. The waves of electricity (corresponding to the sound-waves), passing through the spring and paper, cause the usual friction existing between the point of the spring and the paper to disappear as many times as there are electrical waves or impulses. The disappearance of the friction of course causes the spring to vibrate; and it in turn causes the sounding-board to vibrate, producing a musical note corresponding to the number of electrical impulses transmitted.

But the determined inventor was not satisfied with transmitting music alone. Transmission of the sound-waves of the human voice was the main object in view. And here it may be explained that the difference between musical notes and ordinary voice-waves for telephonic transmission is quite marked. The musical notes are reproduced with comparative ease, owing to the regularity of the vibrations, and also to the fact that they are more nearly of the same amplitude; while the voice-vibrations on the other hand, being of the most irregular character, require much more sensitive appliances, in order that all the sound-waves may be caught and reproduced. At this stage of the telephone's progress the electric impulses were trans-

mitted by means of a diaphragm actuated by the voice, vibrating a platina point fastened to the center of the diaphragm and pressing at each vibration a platina-covered rubber-roller. By this means singing could readily be transmitted; but the moment the regularity of the vibrations ceased, as they did when ordinary conversation was sought to be transmitted, the telephone gave inarticulate results. The next step in the telephone's progress consisted in the introduction of "variable resistances." By means of curious mechanical contrivances the vibrations of the diaphragm were made to alter the intensity of the electric current. These variations moved the diaphragm at the other end of the line in exact unison with the transmitting diaphragm. But, important as was this improvement, the inventor was not satisfied. Next in point of time came the carbon button,—a most important discovery,—by the use of which the human voice is transmitted with marvelous accuracy a distance of many miles from the place of speaking. These various steps of progress in the telephone are here referred to, not by way of description, but only to show the condition of the telephone when the principles involved in the electro-motograph discovery were first applied to it.

Perfect as was the telephone at its last stage of development, it had one serious defect. It could not reproduce the words spoken against the diaphragm at the transmitting end of the line in anything like their original volume. The conversion, at one end of the line, of the waves of sound into electric action, and their reconversion, at the other end of the line, into sonorous vibrations, caused a double loss. Words, therefore, spoken in a loud tone of voice at one end of the line, were reproduced at the other in quite a soft tone. For commercial purposes, this made the telephone very imperfect; as, to "catch" all that was said, comparative quiet was necessary, and even then the whispering receiver could only be heard when the instrument was pressed closely against the ear. To overcome this defect, Mr. Edison called into action the discovery on which he had so long been experimenting. Up to this time, he had used chemically prepared paper as the substance upon which the electric current was to act, in order to produce at a distance a mechanical movement. He soon found that, to obtain uniform action, the employment of some other substance was imperative. Hundreds of different ones were tried in the course of experiment,

until at last the choice fell upon precipitated chalk saturated with a strong solution of caustic alkali and a salt of mercury.

As at present used for telephonic purposes, the electro-motograph instrument, an interior view of which is presented in Fig. 2,

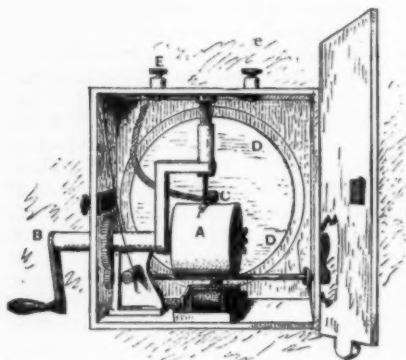


FIG. 2.—INTERIOR VIEW OF THE CHEMICAL TELEPHONE.

is constructed as follows: A is a small cylinder of precipitated chalk, two inches in length and one and one-fourth inches in diameter, saturated with the solution referred to. The cylinder is attached to a shaft which is rotated by a small crank, B. Upon the circumference of the cylinder rests, with some little pressure, a narrow strip of brass tipped with platina, C. The other end of this strip is attached to a diaphragm of mica, D D. The cylinder, A, and strip, C, are made part of the electric circuit by wires running from the screw-posts, E, e, so that the current from the line passes along the strip, C, and through the alkaline solution contained in the cylinder, A, to the shaft, and thence by the wire to the screw-post, e, to earth. When the cylinder is revolved by its handle, the friction or traction of the brass strip, C, resting on it tends to pull the diaphragm, D D, inward, in the direction of the rotation. If now, while the cylinder is being revolved, a current of electricity is sent over the line (and necessarily through the metal strip and the alkaline solution of the cylinder, they being in the circuit), the ordinary friction that exists between the metal strip, C, and the cylinder, A, disappears; and the metal slides freely on the surface of the cylinder, allowing the mica diaphragm to return to its normal position. As the lessening of the friction is in proportion to the strength of the current, the diaphragm will not be caused to

return to that position by a very weak current; hence the instrument will respond to and reproduce all the minute inflections of the human voice. When no electricity is on the line, the revolving of the cylinder produces no effect other than that of keeping the diaphragm pulled inward. On the other hand, when the cylinder is at rest, a passage of the current through it does not affect the diaphragm. It is only when the cylinder is revolving that the diaphragm is caused to vibrate by the current. This principle being clear, it can readily be understood that fifty electrical impulses in one second (the cylinder being rotated) will remove the friction existing between the surface of the cylinder and the strip of brass resting on it fifty times within the second; and the diaphragm, in obedience, will make fifty vibrations within the same period of time, thus causing a sound. In other words, as the electrical impulses follow each other in regular order, corresponding to the sonorous vibrations imparted by the voice to the transmitting telephone, the alternate slipping and catching of the metal strip on the cylinder follows in the same order, causing the diaphragm to vibrate in unison with the original vibrations, and thus reproducing the words spoken into the transmitter at the other end of the line.

Fig. 3 represents a detached view of the diaphragm with the metal strip resting on

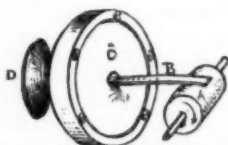


FIG. 3.—VIEW OF DIAPHRAGM AND CYLINDER OF THE CHEMICAL TELEPHONE.

the cylinder. A is the cylinder, B the metal strip, C the diaphragm, and D the mouth-piece.

To understand the principle by which the volume of transmitted vibration is amplified, or in other words the principle by which a whisper uttered in Philadelphia is converted into a shout in New York, it must be borne in mind that the amount of electric action bears no relation to the strength of the mechanical movement it generates. The movement of the cylinder is caused by a power entirely independent of the electric action, it being revolved by the hand of the listener. All that the electricity does by its passage through

the strip of metal and cylinder is to destroy, to a greater or less degree, the friction that ordinarily exists between the cylinder and the strip of metal pressing upon it. And this it does with the expenditure of only a modicum of the energy that would be absorbed by an electro-magnet to obtain the same volume of sound. The electric current merely changes the state in which matter exists, and this requires an infinitely small consumption of energy. Now this strip of metal may be large or small, and may be attached to a large or small diaphragm. If the diaphragm to which it is attached is larger than the one at the other end of the line, whose vibrations transmit the electrical impulses, its swing is greater and its vibrations consequently produce sounds commensurate with the same. This local independence of the mechanical movement renders it possible to amplify the slightest vibrations at the transmitting end of the line into vibrations of great power at the receiving end, so as to make the slightest noise develop into a loud sound. To what extent this principle of amplification can be carried, time alone can show. In the laboratory at Menlo Park it is no uncommon thing to be startled suddenly with the sound of a loud voice roaring through the telephone. An investigation of its cause reveals at the transmitting end, perhaps, the errand boy, whose normal voice is a high treble. Ask him face to face why he roared so violently through the telephone and he will laughingly pipe out, "Why, sir, I only spoke as I always do—no louder than I'm speaking now, sir." For general use the chemical telephone is constructed in such a manner that the loss in power hitherto experienced by the conversion and reconversion of the sound-waves is not perceived, the sound uttered into the transmitting apparatus being reproduced exactly on the receiver. Of course, if desired the receiver may be so made that the sound is largely amplified—amplified, in fact, to such an extent that the curious spectacle may easily be presented of a person who is considerably deaf, and entirely oblivious to

conversation carried on in an ordinary tone of voice in his presence, readily hearing a whisper uttered miles and miles away!

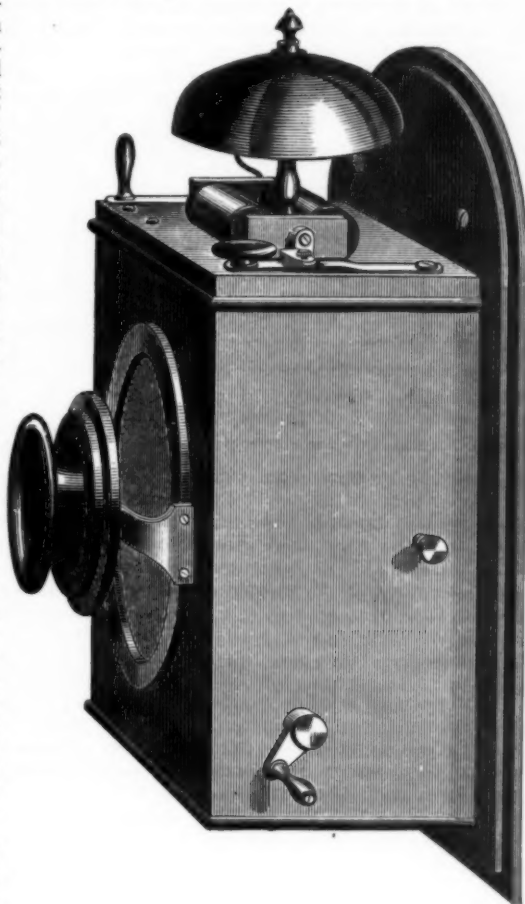


FIG. 4.—VIEW OF THE COMPLETE CHEMICAL TELEPHONE.

APPLICATION TO SIGNALING.

AMONG the other applications which Mr. Edison has already made of the discovery is one in connection with signaling at a distance by bells without the employment of electro-magnetism. Fig. 5 illustrates the method. A metal arm, B, is so arranged by connection with the upright, C, as to rest with some little pressure upon a cylinder of prepared chalk, A, chemically saturated in the manner already described. A spring, E, attached to the upright, C, tends to hold the

metal arm back. The arm and chalk cylinder are now attached to the telegraph line. W, W, and made part of the electric circuit. Fastened to the metal arm is a knob, M. If, while the cylinder is revolving, a current

labor of man and beast. That great success has attended such efforts every one familiar with machinery knows; but still the lubricating liquids and other agencies employed for the purpose, excellent though

they are, leave a wide margin for improvement, for not an inconsiderable portion of the horse-power used in running machinery is wasted in overcoming the friction that exists throughout the various parts. In heavy machinery especially, this loss of power becomes an important element of consideration. By the application of the electro-motograph principle the friction is reduced to a minimum.

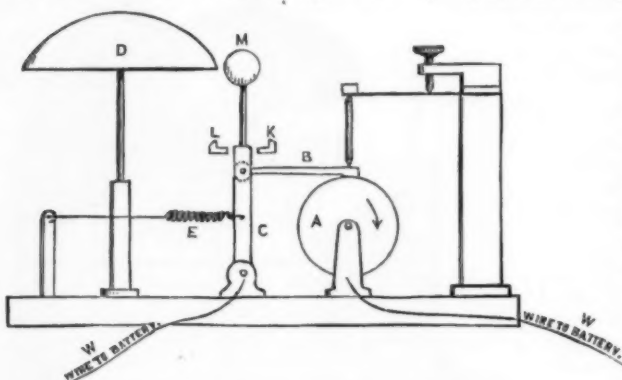


FIG. 5.—APPLICATION OF THE ELECTRO-MOTOGRAPH TO SIGNALING AT A DISTANCE.

of electricity be transmitted over the line, the friction between the metal arm, B, and the cylinder, A, is diminished and the spring, E, pulls back the arm, causing the knob to strike the bell, D. K and L are stops adjusted to regulate the movements of the upright, C.

APPLICATION TO LESSEN FRICTION.

BUT important as is the electro-motograph for the production of mechanical movements at a distance, its application to machinery is entitled to as much consideration by the world of science. To devise methods and appliances by which the friction incidental

application to machinery. S S is an iron shaft revolving in its compartment or journal A, which latter is lined with a layer of leather, D, chemically saturated, on which rests and revolves the shaft. A current of electricity from the cell of battery, B, passes along the wire through the shaft, S S, thence through the chemical solution of the compartment or journal in which the shaft rests, and by the return wire back to the battery, thus completing the circuit. While the shaft is revolving, the electricity is performing its function of diminishing the friction that normally exists between the shaft and its journal. The simplicity of the contrivance makes it appli-

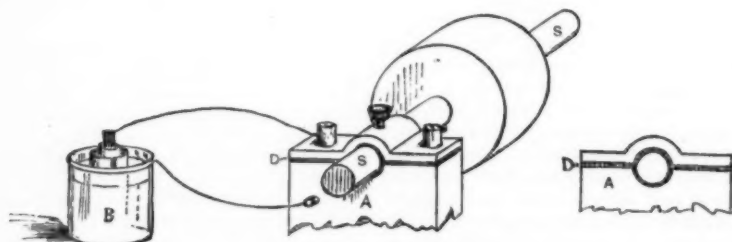


FIG. 6.—APPLICATION OF THE ELECTRO-MOTOGRAPH TO MACHINERY, TO LESSEN FRICTION.

to machinery in motion may be reduced to a minimum has been an aim of inventors ever since machinery first became a factor in the beneficent work of lightening the

cable to almost every mechanical movement generating friction. The locomotive puffing with its long train of cars, as well as the tired and jaded horse panting under an

overloaded wagon, may each, by the diminution of the friction of the axles, have its respective burden lightened.

APPLICATION TO OCEAN CABLES.

ANOTHER property of the electro-motograph, and one fully as important as any that have been referred to in the preceding pages, is its ability to increase the speed of transmission of messages over long ocean cables. The slowness of the Atlantic cable, as compared with the land lines, is the principal cause for the present high tariff for messages between this country and Europe. If the cables could be made to transmit as many messages in a given time as can be

and five inches in diameter, attached by its center to a small upright post of metal, G, which rotates the disk by means of clock-work in the box, F. Resting on the disk is one end of the metal arm, B B, the other end of which contains a small pencil or stylus, C, for marking the roll of paper, D, passed under it. Through the metal arm, a few inches from the disk, is run a torsion-wire, E E, fastened at either end to small screws. The wire from the cable is connected with the metal arm, and the wire leading to earth is connected with the chemical solution in the chalk disk. The tendency of the torsion-wire, E E, is to swing to one side the metal arm, B B, but the normal friction existing between the metal arm and the disk at their point of contact overcomes this tendency,

and the metal arm remains in a fixed position. If now, while the disk is being rotated, a current of electricity is sent over the cable through the wire, thence to the metal arm, B, and through the chemical solution on the disk, A, to the earth, the normal friction between the point of the metal arm and the disk is diminished, and the torsion-wire, E E, having no counteracting force, swings to one side the metallic arm, B B, and a mark is made on the roll of paper passing under the extreme right of the metal arm.

These marks may be readily arranged into a code of characters similar to the Morse alphabet.

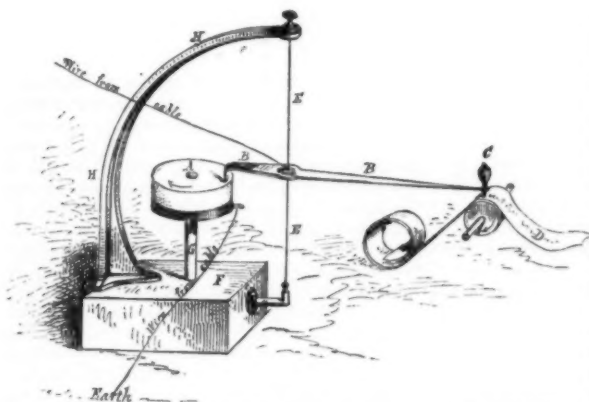


FIG. 7.—APPLICATION TO INCREASE SPEED OF TRANSMISSION OF MESSAGES OVER LONG OCEAN CABLES.

transmitted within the same time over land-lines, there is no reason why the charges now in force for inter-continental telegraphing should not be reduced from fifty to seventy-five per cent. The average rate of speed over the Atlantic cable is about ten words per minute, while the average on land-lines of this country is about twenty-two words per minute. The peculiar phenomena incidental to the transmission of electrical impulses through submarine cables of great length, such as the Atlantic cable, have made a higher rate of speed hitherto unattainable. To increase the speed of the Atlantic and other long cables to twenty-five or thirty words per minute, Mr. Edison has devised a special electro-motograph (Fig. 7). The precipitated chalk with its chemical solution is made this time in the form of a disk, A, two inches in thickness

arranged into a code of characters similar to the Morse alphabet.

APPLICATION TO ASCERTAIN FEEBLE PULSATIONS OF THE HEART.

CONNECTED with the carbon telephone the electro-motograph may be employed to detect the feeble pulsations of the heart of a person seemingly dead. For this purpose, place over the heart a very delicate carbon receiver which is attached by wires and a cell of battery to a specially prepared electro-motograph made to amplify sound many degrees. The pulsations of the heart act upon the delicate carbon and it in turn vibrates the diaphragm of the electro-motograph upon the general principles already explained. Inasmuch as the degree of

amplification of the sound-waves by the electro-motograph may be regulated to suit the necessities of the occasion simply by increasing the area of the diaphragm, it can readily be understood that the most delicate of sounds may be brought out with clearness and, what is more, with absolute accuracy. And in connection with accuracy it may be observed that the electro-motograph, as used for the purpose of amplifying sound, overcomes a defect in the microphone that has been quite a serious drawback to the usefulness of that instrument. The microphone, as is well known, amplifies sound-waves many degrees, making

audible, for instance, such delicate sounds as those made by the feet of a fly passing over paper, but unfortunately, the reproduction of the sound as amplified is far from accurate. On an average, about four times out of ten the sound as amplified cannot be recognized as the original sound, the changes in its character being due to the magnetism employed, which latter interjects its own attending phenomena. All the wonderful results in the amplification of sound, attainable by the microphone may be obtained, and in a more perfect manner, by the electro-motograph.

TOPICS OF THE TIME.

Southern Civilization.

WE wonder if the South knows how hard it is making it for its friends and those who would think well of its spirit and society. We know there are two Souths, but everybody does not know it. We are quite aware, and every one is likely to be so, that the South is politically a unit for its own purposes. Even in this we think Southerners make a grave mistake, as Southern solidarity will be sure to beget Northern solidarity, and the South knows what that means for them and their views of national policy. But for this we have no disposition to blame them. We understand in this quarter that the South has no great love for the national flag as such, and that "the lost cause" is still very precious to its politicians and its people. We understand this, we say, and we expect in all their dealings with national affairs only such a policy as would naturally be dictated by the circumstances in which they are placed, and the unrepentant spirit which still possesses them and on which they take their stand and boldly make their boast.

With this we do not quarrel. We expect it. It is the most natural thing in the world that we should have it; but certain events have occurred in the South of late with astounding frequency, which betray a condition of morals and society that makes every true friend of the South and every true American hang his head in shame. Murder after murder is perpetrated in high life with the coolest blood and nobody is arrested for it and nothing is done about it. Now, as we have said, we are perfectly aware that however much of a unit the South may be politically, there are socially two Souths. There is a law-loving and law-abiding South, and there is a South that is neither the one nor the other. We understand perfectly that to a great number of Southern people such a beastly murder as that of Judge Chisholm and his family is horrible. We understand that to these people such notable mur-

ders as have taken place all over the South during the last three months are a great shock and a great sorrow. The feeling finds expression in some of their best newspapers, but the trouble is that this South is utterly overawed by the other South, so that no man dares to move for the maintenance of the law and the punishment of crime. Murder is committed, and the murderer shakes his bloody hands at the law everywhere and walks the streets with entire freedom and impunity. Human life is accounted of no sacredness whatever, and law and the executors of law are held in perfect contempt. The judge upon his bench is not safe. Even the lawyer who tries a case that involves any serious personal relations takes his life in his hands when he does so. The most trivial causes seem sufficient to awaken the brutal instincts of men and to induce the extreme of violence. Fighting weapons seem to be in every man's pocket, as if he lived in a state of war, and he does not hesitate to use them on the smallest provocation.

We read of banditti in Italy who make it unsafe for a traveler who has any money to get outside the lines of ordinary travel, and we wonder at the imbecility of a government that can give him no protection, and at the low state of civilization that renders such abuses and outrages possible. We have no longer any reason to look abroad for anomalies of this sort. These Southern murders give evidence of a lawlessness and a degraded civilization much more notable than anything that can be found among the Italian wilds and mountains. They are abominable, beyond the power of an ordinary pen to characterize. There is nothing whatever to be said in apology for them. The American, when he reads of them, can only hang his head in horror and shame, and groan over the fact that such fiendish deeds can be perpetrated under his national flag without punishment, and without even the notice of those who pretend to administer the law.

We warn this better South of which we have spoken that it must arouse itself and assert itself, if it would save the section of the country which it so enthusiastically loves from irredeemable disgrace. The thing has gone too far already, and unless these people are willing to pass the South into the undisputed possession of the men who despise the law and propose to take its administration into their own violent hands, they must arouse themselves, and become the sworn and devoted vindicators of the law. When a man takes the life of a brother man he must be made to suffer the legal penalty. They cannot but see that the matter is growing worse from year to year. Any man can commit a murder now, if he be in high life, and do it for personal reasons, and bear a white skin, with a great degree of certainty that nobody connected with the law will take any notice of it; and so long as this fact obtains, the murders will go on, and nobody will be safe. A man might as well live in hell as in a community where the law has no force and life has no sacredness. As an American who loves his country, we are ashamed of these outrages upon Christian decency and modern civilization, and they are, indeed, a burning shame upon the nation, and especially that part of the nation which has been in the habit of claiming for itself a very high stand in all those matters that relate to social purity and high breeding.

We assure the South that outside of politics, among the great Christian people of the North who wish them well, and who, in any calamity that may befall them, will always be their sympathetic friends and helpers, there is great grief over what they hear of violence and outrage upon blacks as well as whites. The stories told by the poor creatures now emigrating from the South to Kansas, braving cold and want and almost certain death, to get away from homes where they have no protection from the rapacity and the cruelty of a race whose education gives them an advantage, are sufficiently instructive. Indeed, the emigration itself, with its attending circumstances, is a terrible story. This, however, is but one story. The air is full of them, and we cannot doubt that they are mainly true, because they are so directly accordant with the line of notorious facts which pass unchallenged in every quarter. All these things are sad beyond our power to express, and in the friendliest spirit we call upon that better South which we know exists, to assert itself, and declare that these things, so cruel and disgraceful, shall no longer degrade the American name.

An Aspect of the Labor Question.

THERE is probably no country in which heredity has played so unimportant a part in the national employment as it has in America. No true American child thinks the better of a calling from the fact that his father has followed it. In European countries, especially upon the continent, men inherit the trades and callings of their fathers. Here, they are quite apt to despise them and to leave them. Our farmers' boys and the sons of our blacksmiths and carpenters all try for something higher,—for an

employment that may be considered more genteel. This is the result of certain ideas that were early put afloat in the American mind, and have been sedulously cultivated,—in the newspapers, in books prepared for the young, and in the public schools. Every boy has been told more than once—indeed, most boys have had it drilled into them—that the Presidency of the United States is within their reach; that it is a part of their business to raise themselves and better themselves; especially, to raise themselves above the condition to which they were born. Somehow or other, in the nurture of these ideas there have been developed certain opinions, with relation to the different callings of life, as regards gentility, respectability, and desirableness for social reasons. The drift of the American mind has been away from all those employments which involve hard manual labor. The farm is not popular with the American young man. The idea of learning a useful trade is not a popular one with the typical American lad, or even with his parents. If he get a liberal education, he must become a professional man. If he get a tolerable education, he must become a semi-professional,—a dentist perhaps, or the follower of some genteel employment of that sort. He drifts away from his farm into some of the centers of trade and manufactures; he becomes a clerk in a store, or a teacher of a school, or a practitioner of some art that relieves him from the drudgery of the farm and has an air of greater respectability.

The young man's sisters are affected by the same ideas. Housework, to them, is low work, menial work. It is not respectable. They go into factories, they become what are denominated "sales-ladies." Even the poor people who have hard work to keep body and soul together are affected by these same notions. We know of families where the daughters are not taught to sew, where they are instructed in none of the more useful arts, and where they aspire to raise themselves to professions of various sorts, to anything but manual work. The consequence is that in these days of business depression, when labor is hard to procure, and those who have money are obliged to cut off some part of their luxuries, these people are stranded in gentility and their genteel notions, and are the most helpless part of our population. They can do nothing useful, and are absolutely cut off from all sources of revenue. Some of the most pitiful cases we have met during the past five years have been cases of this character. One lady tells us: "My girls are as good as anybody's girls!"—a statement which we deny, because they are not able to make their own dresses or cook their own food. And the fact that her girls are as good as anybody's girls is regarded as a matter of pride, when they are as helpless as babes, and when they are actually ashamed to undertake any useful work whatever, unless that work happen to square with their notions of gentility.

We feel that this is all a mistake. Heaven forbid that we should suppress any man's or any woman's aspirations after excellence or after improvement

of personal position. We understand all this, and sympathize with it all. But it is not possible that the whole American people can rise out of ordinary, useful labor into high position. It is not possible that every lad who goes to a district school can become President of the United States. These useful employments on the farm and in the shop of the mechanic lie at the basis of all our national prosperity. This work must be done, and somebody must do it,—and those who are best adapted to it must do it. No greater wrong can be done to a lad than to lift him from the employment to which he is best adapted into something which seems to him to be higher. In these days, the foreigner is the man, as a rule, who does the work. In traveling over the country, if one loses a shoe from a horse, the chances are many that the blacksmith he will find at the wayside will be an Irishman. The old Yankee blacksmith has "gone out," as we say, and we are to-day dependent upon the person we import from Europe for the work that is necessary to carry on the farm, for the work that is necessary to carry on our manufactures, both in a large and in a small way, for the work of the kitchen, and for all the service of the household.

It is very hard for a man who has been bred an American to conceive of such a thing as over-education for what are known as the common people. Yet there is something in the education of our common people, or something in the ideas which have been imbibed in the course of their education, which seems to unfit them for their work, which makes them discontented, which disturbs them, and makes it well-nigh impossible for them to accept the con-

ditions of the lot into which they are born, and the employments which have been followed by their parents. It has become, indeed, a very serious matter, and deserves the profound attention of our educators and political economists. If by any study or any chance we could learn the cause of these great changes and obviate it, it would be a boon to the American people. As it is to-day, the avenues to what are called genteel employments are choked with the crowds pushing into them from our public-schools. Young men with good muscles and broad backs are standing behind shopmen's counters, who ought to be engaged in some more manly pursuits, who would have a better outlook before them and would have a better life and more self-respect, if they were doing a man's work behind a plow or behind a plane. There are women in large numbers striving for genteel employments, who would be a thousand times better in body and mind, if they were engaged in household work. There are men and women even in these hard times, when they hardly know where their next meal is coming from, and have not the slightest idea how they are to procure their next new garment, who are still very difficult to please in the matter of work, and who will crowd their daughters into stores and shops, rather than apprentice them to dress-makers where they may learn a useful trade and earn increased wages. In the meantime, the more sensible foreigner is picking up industriously and carefully all the threads dropped in those industries which were once purely American, and the Americans pure and simple are becoming ruinously and absurdly genteel.

HOME AND SOCIETY.

Suggestions to Ocean Travelers.

THE traveler who intends to cross the ocean for the first time usually has some perplexity in selecting a line of steamers, and when he has decided upon the line the perplexity recurs in picking a desirable vessel out of its fleet. There are steamers and steamers,—some uncomfortable ones in good lines, and some comfortable ones in bad lines, and each line has two or three superior in size and speed to others of its fleet. The fastest attract the fullest complement of passengers during the summer season, and applications for berths in them should be made at least five or six weeks before the intended sailing. But, unless time is more precious than it is likely to be with the tourist, or unless sea-sickness is felt to be inevitable, and the briefest possible voyage is the greatest desideratum, the writer would advise the selection of an unfashionable vessel, supposing, of course, that its unpopularity is the consequence not of unsafety or antiquity, but as is often the case, of inferior engine power. The steamers of a thousand horsepower which speed from Sandy Hook to Queens-town in eight days are invariably overcrowded in

June and July; two dinners are served daily in the saloon for different sets of passengers; the stewards are so overworked that, be they angelically well disposed, they cannot give proper attention to every passenger, and the decks are so thronged that promenading is next to impossible. But the steamers that are two or three days longer, accomplishing an easy two hundred and fifty miles a day, usually afford better state-rooms, and, in most particulars, greater comfort.

The cost of the voyage varies from \$60 to \$100; but it is not less than \$80 in any of the first-class lines. One hundred dollars will secure an outside room for two persons,—that is, one hundred dollars each; and for eighty dollars a passage is given in an outside room containing four persons, or in an inside room containing two. The outside rooms are provided with "ports" or windows which can be opened in smooth weather, and the occupants may dress in the summer mornings with an exhilarating breeze blowing in upon them from the sea; while the inside rooms receive all their light and ventilation from the deck. But a room containing four is so

exceedingly inconvenient, especially in tempestuous weather, that if the traveler limits his fare to \$80 we advise him to take the inside room with one companion, although it is sure to be breezless in hot weather and dark at all times. Four persons endeavoring to dress in a space about eight feet square, when the vessel is pitching and rolling in the "roaring forties," do not succeed without heroic patience and innumerable mishaps.

The cool, fresh air admitted by the ports usually tempts the occupants of outside rooms to keep them open, and to complain when the stewards close them; but it is never safe to retire without seeing that they are screwed up.

The bath-room of the modern steamer is one of its greatest luxuries, but if there are many passengers, and especially if the passengers include a number of young Englishmen or Canadians, to whom the morning "tub" is the invariable attendant of breakfast, it is necessary to see the bedroom steward as soon as you go on board, and have the hour recorded at which you want to bathe. The water is cold, but it is the veritable brine of mid-ocean, and the chill can be taken off by a can of hot fresh water, which the steward will obtain from the galley.

The most important consideration, however, is the location of the state-room. In old-fashioned vessels all the sleeping accommodations are "aft," that is astern, where, naturally, the pitch of the steamer is most perceptible, and where, in heavy weather, the propeller as it strikes the water, produces a concussion terrible to the nerves and annihilative of repose. But in the steamers of more recent construction, the saloon, ladies' cabin and state-rooms are amidships, and if the traveler is solicitous about his comfort he will see to it that this is the case in the vessel which he selects for his voyage. Even when the rooms are amidships there are discomforts peculiar to that arrangement; but if applications for berths are made in season, and if the plan of the steamer is consulted at the agent's office, a location may be obtained where the pulsations of the powerful engines are inaudible, and where in the heaviest weather the only motion apparent is a gentle heaving. Choose a room some distance aft or forward of the engine, and see that it is not in proximity to the closets. At the same time if the reader is fastidious, he should be prepared to pay for a first-class berth; while if he is nervous, sea-sick and irritable, the best ship built will still seem uncomfortable.

Having had a state-room assigned you, put as little as possible into it. Any box or valise that is not absolutely wanted during the voyage should be stowed in the hold, and marked accordingly when it is sent to the wharf. Sensible and economical people do not "dress" at sea. Old clothes may be worn out on the voyage; new ones are sure to be spoiled by the sea air and the paint and grease which are prevalent on the cleanest ships afloat. Be fully prepared for extreme changes of temperature. Leaving New York, and for several days afterward, you may have warm weather, and suddenly a wintry cold may come which will necessitate woolen under-

wear and over-wraps,—a transposition as familiar in July or August as in April or May. A hanging dressing-case of brown holland backed with oil-cloth, with pockets for sponge, comb and brush, etc., etc., is useful, and may be swung from the wall of your room. A steamer chair is also necessary for a lady or any elderly person, although it is superfluous to a strong young man.

The seats at table are assigned either at the office of the company when the berth is engaged, or by the chief steward on board, and experienced travelers say that a position near the captain or purser is advantageous; these officers usually select personal acquaintances for their nearest neighbors, and others who are not of the elect have no more right to insist upon a particular seat than they have to take possession of a state-room which they have not engaged, however, they are sure to find every attention paid to their reasonable wishes. As a matter of fact one seat is not better than another; the table is loaded, and the stewards are untiring in their courtesies.

Before going on board provide yourself with some loose silver and gold, as American currency is heavily discounted by the pursers. Be at the wharf at least an hour before the time of sailing, and if your departure is to be in the busy season, engage your passage as far ahead as possible.

WM. H. RIDEING.

The Origin and Practice of Polo.

THREE summers ago, some young men in New York formed the Polo Club, and built a sumptuous house at Fordham, with grounds especially laid out for the game. Previous to that time polo had not been played in America; it was introduced *via* England from India, where it had been known since the days of Scheherazade. The grounds of the Polo Club were open to all spectators. Upon a level greensward fourteen athletic young men arranged themselves in sides, mounted on vigorous and hardy-looking Indian ponies. They wore colored shirts, velveteen riding-breeches and the small turbans which have come to be known as polo caps; the color of the caps and shirts indicated to which side the players belonged. The Indian ponies were uneasy, and shook their heads and whisked their tails, and shied this way or that. By and by a man advanced to the center of the field and threw up a ball, and simultaneously both sides charged for it with mallets five or six feet long, the heads of which were like those of ordinary hammers. The contest was fierce and precarious. Approaching each other at full gallop, and spurring their ponies to further exertions, the opposing players met in a knot, from which they endeavored to extricate themselves by sudden wheels or dashes forward. The ponies plunged and reared and kicked. The mallets were raised and whirled at the ball, often missing it, and sometimes striking the head of an unlucky player or the flank of a pony. Now and then a successful stroke was made, and the ball spun toward a goal with the prospect of entering it, but as it reached

the verge, a well-directed blow sent it flying into the middle of the court again; and so the fortunes of the game fluctuated until the ball was passed into the goal. The victory was not won without some mishaps. Exasperated beyond endurance by the blows of the mallets, the ponies "bucked" and threw their riders. It is evident that the spectators had most of the amusement, and the participants retired sore and wearied.

With experience and practice the members of the club have eliminated much of the roughness that first attended the game, and it is seldom now that a man is unseated, or that he or his pony is struck by the mallets. As an exercise in horsemanship, the game is incomparable. It develops nerve, self-possession and stamina.

The ground is four hundred feet long and two hundred and fifty feet wide; it is inclosed by tall white poles fifty feet from each other, and the ends are marked by two more poles, twenty-five feet apart, each bearing a white flag. The ball must be driven between the flags to secure a victory.

According to the rules of the Westchester Club, the ponies must not exceed fourteen hands in height, and must not show any vice; spurs with rowels are

not allowed, except on special occasions; a player may interpose his pony before an antagonist to prevent him from reaching the ball; when the ball falls out of the boundary it must be returned by an impartial person, and before the ball is thrown up by the umpire at the outset of the game, each "side" must be stationed about twelve feet within the goal posts; swinging the mallet is particularly prohibited.

The present summer is likely to extend the public interest in the game; an English team will inaugurate a series of contests with the Westchester Club, and other matches will be played by the clubs at Long Branch, Buffalo, Pomfret and Woodstock, Connecticut, all of which have been established during the past two summers. There is no reason why there should not be a polo club in every large town. Suitable ponies can be purchased for seventy-five dollars apiece, and the other equipment necessary is inexpensive. The gentlemen connected with the Westchester Club are desirous of encouraging the game, and information will be cheerfully given by Mr. Hermann Oelrichs, No. 2 Bowling Green, New York, to whom application should be made by letter. ALEXANDER WAINWRIGHT.

CULTURE AND PROGRESS.

The Art Season of 1878-9.

THE past winter and the present spring, beyond the usual run of seasons, have been busy with affairs of art. Four main exhibitions have given artists so many capital chances of exposing the results of their labors before the multitude, and of earning whatever advantage may accrue to them from the criticism of the daily and weekly press. Whether the criticism has been favorable or unfavorable, discriminating or foolish, is, after all, a secondary matter. The American public is too thoroughly trained to the habit of looking at more than one side of every question to take praise or blame of an artist without due caution; they may remember strictures or eulogies, but those whose favor is of any importance are sure to suspend their judgment until they can see for themselves whether the criticism be just or unjust. And, fortunately, the critics of the daily press are of such different mind in regard to the merits of artists, that if there be any good in a picture, some writer will be sure to bring it out prominently, even if it strain his own conscience a little.

THE SOCIETY OF AMERICAN WATER-COLORS.

FIRST to open, and the exhibition most heartily welcomed by the public and the press, was the Water-Color Exhibition, with its multitude of small pictures at low prices,—just the thing to tempt small investors. But there are more artistic grounds for this society's financial success. Water-colors lend themselves better to the artistic

qualities of our painters than oils, and the public understand and like them better. There is a quality among the Americans of the eastern and middle states that is called, for want of a better term, Puritanism, and although this characterization does not really fit the case, it will be sufficiently understood. This Puritanism, then, makes us a little obtuse to, and a good deal afraid of, anything that looks mellow, languid, or luxurious; so that when a painter does exhibit signs of a strong feeling for color, we are apt to fight shy of him. Water-colors are crisp, clear, and, unless in the best hands, crude; but even crudeness is not so terrible to us as richness of color. It is like our fear and contempt for what is called "Frenchness" of manners, and like that may be termed a provincialism—healthy, it may be, but still a provincialism. The narrower limits and greater simplicity of water-color drawing predispose Americans to excellence in this branch, just as the wider range and greater complexity of oil-painting cause many of those who venture into that field to produce compositions rank or turgid in color.

It would take too much space to name all the artists who made a mark in this exhibition. Among the well-known, Mr. Winslow Homer bore off the palm. No better man could be selected to point the above moral than Mr. Homer, with the exception that his painting in oils is not rank or turgid. But his force lies in quick, light sketches, and his talent for color finds in this medium its very happiest expression. His New England children treated as shepherds and shepherdesses were very real

in spite of their Arcadian ribbons. Of the new-comers, Messrs. Muhrman and Currier received most attention, the former for pleasant colors distributed in nice contrast and applied in a broad handling, the latter for "impressions" of landscape in which the least possible outline and modeling had been used. Mr. Currier lives in Munich, and is a painter in oils as well as water-colors; he shows one extreme of handling, while painters like Henry Farrer, W. T. Richards, and J. C. Nicoll show the other. Two very clever young painters in the manner of Fortuny created a sensation—Messrs. Brennan and Blum—and mark the increasing attention paid by Western people to art subjects. Like Duveneck, Chase, Beckwith, Muhrman, Twachtman, they come from the West. Among the good water-colorists was Walter Shir-law; and John La Farge contributed a fine little snowy landscape and several delicate flower-pieces. There were the usual number of clever foreigners represented, and fewer than usual of large elaborations of European cathedrals and market-places.

THE SALMAGUNDI SKETCH CLUB.

THIS exhibition was second to none in importance, for it was practically a new impulse in art. The club has existed heretofore, but comparatively unknown. Instead of holding its exhibition at a smaller gallery down town, where little was to be seen but work by the members of the club, it has taken a new departure and has begun to exhibit at the Kurtz Gallery, where contributions are received from outsiders. For this large and interesting collection the weekly and monthly illustrated press is in great part responsible. The exhibitions of the Academy and various loan exhibitions have also helped, but their facilities were necessarily limited, and the time had come for an independent exhibition. Paintings in black and white of some elaborateness were found at the Salmagundi show, among which those of Mr. J. G. Brown were prominent. In black and white the finer shades of color value are necessarily omitted, and realism has comparatively little play. This is favorable in general to artists deficient in a delicate sense of color, and painters who in colored oils had been committing all sorts of abominations turned up at the black-and-white exhibition with crayons or other pictures in the two extremes of light and dark, which evinced great talent and no mean sense either of movement or of the picturesque. Prominent among the workmen for the magazines were Abbey, Reinhardt and Kelly. R. Swain Gifford and C. H. Miller had crayons in their several styles of the subdued picturesque; Maynard, Miss Bartol and Miss Oakley had good work in charcoal. Much attention was also attracted by the contributions of Messrs. Vanderhoof, Burns, Pyle, George Inness, Jr., Kappes, Church, and others. There were etchings by Wyatt Eaton and Farrer, and clever novice work with the pen in a reproduction of a picture of Fortuny's make, by Blum.

Artists have a metaphorical use of the word color, which is often misleading. They will say of a char-

coal sketch that it is full of color, when its clever manipulation of chiaroscuro imitates, as far as it can, the actual difference in color seen in the original from which the sketch is made. This twist of meaning seems to have arisen among etchers and engravers of colored paintings, who have tried to simulate not merely outlines and modeling of the painted figures, but the actual colors of the paint. This collection will undoubtedly effect much in systematizing our illustrations of books and magazines; it afforded an opportunity to compare work side by side, and gave new encouragement to a branch of art destined to attain great dimensions in this country.

THE SOCIETY OF AMERICAN ARTISTS.

THE movement that established this society was a healthy sign. It acts as a corrective on the stagnation of the Academy of Design, and furnishes an outlet for energies which that body, as a whole, is not in sympathy with and would neglect. Fault was found with the exhibitors in the Kurtz Gallery because they had been a good deal talked about, and yet showed, after all, few pictures of popular importance, few large compositions which could rivet the attention of the multitude. To make such a demand is to mistake the aim of the society; the fact is, however, that for the number accepted there was a large proportion of "important" canvases. If the society have any meaning, it is to afford a chance for the exhibition of paintings irrespective of size or popular "importance." That sort of thing has been tried for many years at the Academy, and its walls are always open to a picture that will draw a crowd. The Society of American Artists is supposed to appeal to artists, amateurs, and connoisseurs rather than to the wider public. Already it has filled to a good measure the demand for such a nucleus. There were only a few elaborate compositions at the recent Exhibition, and these were directed more to the select few than the indiscriminating many. The large canvas by Mr. J. Alden Weir, for instance, was a distinct failure, judged as a picture for popular exhibition, but it revealed a cleverness and a rather ill-digested power that spoke better for the artist's future than his more finished productions elsewhere. The scene is in a park, and seven persons are either sitting or passing, so that the canvas is full. Taken separately, almost every figure is a fine piece of work. Mr. Wyatt Eaton's woman with a mirror gave rise to conflicting criticism. On the whole, it marked a greater advance than appeared in the work of any other artist present. Color, pose and conception were singularly harmonious, mellow, and thoughtful. A picture by Mr. Thomas Eakins exhibited a celebrated Philadelphia surgeon lecturing to a class of medical students over the exposed thigh of a patient. It was noticeable that the horribleness taught nothing, reached no aim; and that especially disgusting, and by no means likely to the facts, was the presence of the mother of the sufferer, wringing her hands and apparently screaming with horror. It is painted in a dry but highly technical manner, which, in one sense, may be said to have agreed with the subject. Mr. George Fuller, of

Boston, an Associate-elect of the Academy, had a very original landscape with trees and a girl in the foreground, the time being sunset. Mr. Fuller has a fine sense of the mystery of light and shade, and a special talent for the management of low tones of gray, olive, and green. The most imaginative picture was a little canvas by Mr. John La Farge, representing a Venus Anadyomené with a Cupid in the air on either side of her, one offering her ornaments, the other a veil. She is stepping out of the shallow sea-water on firm sand, and has a heavy tread, as if still dripping with water. It is a beautiful picture in its subtle meanings and delicate, masterly manipulation. Mr. La Farge's cactus flower was also warmly admired for its deep, rich color. The landscapes of Mr. Homer D. Martin, another Academician, found great favor for their richness and depth of poetic sentiment.

Most people did not know what to think of Mr. Albert Ryder's mysterious pictures of horsemen following hounds through shadowy landscapes, of herdsmen going home through the twilight, of a woman in a wood with children. They have been much praised and much laughed at. Mr. Ryder is evidently fully aware of his aim and of his own powers. If, in his passion for color, he neglects outline and drawing, it is not that he admires drawing less, but color more. His work is fascinating in the stricter meaning of the word, for it grows on the observer more and more, the oftener he sees it. He has great variety too, although he is always individual. Mr. Twachtman's landscapes were admired, and his Venetian marines received the highest compliment; some were bought by artists for their own studies. He has a good taste and excellent technique, delighting to render the sheeny look of water that is troubled only by small waves, and rendering it broadly and well. The merits of Mr. W. M. Chase's painting were recognized at once on his appearance here, and although he made no striking hit at this Exhibition, he showed even more than usual range, contributing a large landscape of some merit. The "Goose-Girl" of Mr. Walter Shirlaw marks his best technique and shows his good feeling for picturesqueness in color and composition. Mr. Duveneck did not add laurels to his fame, but neither did he lose any. This artist is now settled in Munich, where he has opened a school of art,—a bold proceeding for a young American painter! Mention should also be made of two pictures from young artists studying abroad, Messrs. Abbott Thayer and Sargent. The former had a misty landscape with cows standing in shallow water. He has wonderfully preserved the difficult perspective of a misty atmosphere. The cow in the foreground is a fine, highly finished portrait of a handsome beast, bearing all the cow characteristics of heaviness in weight, restfulness and slow thoughtfulness. Good work was seen in Mr. Sargent's free and easy Capriote girl. Pictures worthy of more notice than can here be made were also contributed by Messrs. Swain Gifford, Lowe, Armstrong, Vinton, Volk, Mrs. Darrat, Miss Cassatt, Miss Oakey, and a number of others.

The collection of busts and bass-reliefs at the Kurtz Gallery was interesting but meager. Mr. Olin Warner offered the most important piece, in a marble statuette, representing "Twilight." The womanly figure was beautifully modeled. The most pronounced expression is a shrinking movement, which appears to finer perceptions in the legs and bust, but is most evident in the position of arms and head. The arms are drawn about the face and pull the long veil or drapery so that the face is in shadow. This little imaginative figure shows new beauties at every point. The bass-reliefs of Mr. Augustus St. Gaudens were admired for their excellent taste, their decorative qualities; those of Mr. Warner were sterner. Mr. O'Donovan had a medallion portrait of Bayard Taylor, and Theodore Bauer a plaster sketch of a "Drunken Silenus."

One word is not misspent on a feature introduced by this young society—the free exhibition on Sunday afternoons. Would that the managers of our art collections and libraries understood as well as these young men what is truly charitable and what is really religious! As it is, the floating Sunday population is driven either into beer-shops, or back into their unattractive homes.

THE ACADEMY OF DESIGN.

THE exhibition in the Academy can hardly be said to have had a distinctive character of its own; it comprised the elements of all the three preceding exhibitions. There were water-colors, crayons, pen-and-ink sketches and oils, terra cotta, clay, marble and bronze statuettes. The great bulk was composed of oil-paintings. There was Mr. Dewey with two little impressionist pictures, and Messrs. Duveneck and Julian Weir with more or less impressionistic likenesses. A new painter, Mr. R. A. Blakelock, was found in two unpromising positions with pictures that reminded one strongly of Mr. Albert Ryder's canvases in the Kurtz Gallery: one a view on a trout-stream in Vermont; the other a bandit scene, treated in a finely mysterious way, where a captive woman has been bound to a tree and the captors are in council about a fire.

No single piece excited the admiration aroused by the Venus Anadyomené of Mr. John La Farge at the rival exhibition, for none possessed its combined imaginativeness and technique, nor was there any study of the nude so thoughtful and effective as the Venus of Mr. Wyatt Eaton. Still the galleries, taken as a whole, left a good impression on one who would ponder well over the relative merits of this and of preceding shows in the same place. Advance there was, but so evenly distributed over the work of two or three hundred artists that only persons who have been watching affairs in art sharply for several years would be likely to see it. While it is true that the canvases were larger, on an average, than those of last year, yet the general work was better. More attention is being devoted to technique, and the impulse of the young malcontents who founded the Art Students' League and

the Society of American Artists has been most healthy. We seldom see, nowadays, the panoramic leviathans that used to block the walls of the Academy. Where a painter of ten years ago would have insisted on including fifty miles of country in his view, he is now content to execute more carefully a few rods of landscape.

Some of the old painters have shown signs of yielding to the movement of the times, notably Messrs. McEntee, Wyant and the two Smillies. Others have felt the impulse and gained all they could from it, such as Messrs. Miller, Minor and Swain Gifford. The former two seem to be painting from no conviction, but readily assimilate almost any style they choose. Mr. Swain Gifford has been getting into a rut, but retrieved himself with a noble landscape called "Salter's Beach." Mr. George Inness has never done better work than this year. His "Hazy Morning" was delicate and broad, deep in its aerial distance and fine in composition. As a cloud study, his "Near Perugia" was a veritable triumph; the masses of cloud had that effect of weight and yet of being supported in the air which storm-clouds really assume. The "Clouds" of Jervis McEntee are good in their way, but cannot stand comparison with these. Mr. McEntee's picture, however, is fine in sentiment. Mr. Homer D. Martin had two landscapes of great beauty and interest, a smaller view of river and trees with a sunset, and a larger scene from the borders of Lake Ontario. The composition of the latter was original, and the endeavor to get the effects of sand-dunes, brown sand-vegetation, and the melting lines of blue-green lake and sky, very interesting to study. Portraits and landscapes were fully represented, and although a hasty glance over the collection might lead one to think that *genre* painting was neglected, in truth there was a good deal of it, though generally of small size. Mr. Julian Scott exhibited a patriotic picture with "In the Corn-field at Antietam," and Mr. Winslow Homer exhibited a singular and very pleasing study of the upland cotton plant, with negroes picking cotton. The sky of this picture has been criticised for its color and thinness, but people were pretty much at one as to its merits. Mr. George Fuller's "Romany Girl" may, or may not, be typical of the gypsy; but the spirit of the painting is gypsy-like. Face and background harmonize in the best manner—unconsciously; and the face is wild enough and shrewd enough to suit the name, while the surroundings are not without a good share of the mysterious. The latter is Mr. Fuller's favorite vice, or favorite virtue, according to the way of looking at it. His more elaborate *genre* picture, "And She Was a Witch," is quite a little drama in itself. In the dimness of a woody neighborhood to a house the colonial sheriff is dragging an old woman off to court; before her tramps the Puritan minister, and from far off another woman expostulates with a gesture. A young girl is flying into the house, with terror depicted in face and movement.

"What," it may be asked, "is the apparent upshot of the recent movements in art matters, of which

these four very fully attended, not to say crowded, exhibitions are the latest visible outcome? What are the artists doing, and whither is American art tending?" We answer that, in our judgment, the tendency among the artists is toward more thorough, and therefore more thoughtful, work. It is true that the greater attention to technique has hurt the "picture" quality of the exhibitions. There were fewer great canvases that would cause people to gape who know or care nothing for art, and only come, like children, to be amused by "pictures." It may also be true that the greater stress laid upon technical methods has taken artists away from imaginative compositions. But this cannot be otherwise than healthy, although for the time being the exhibitions may lose in interest. It is to be hoped that it comes from a real conviction among our artists that they were slipshod in their drawing, crude in their coloring and unobservant of the real truths—both the inner and the outer truths—of nature, and not from timidity before the steady stream of criticism that has been launched upon them for the last five or ten years. The fact is, the arts will no longer be used simply for the amusement of the public. Painting will not be confined to pleasing through ideals of beauty; it wishes also to report things exactly as they are; to thrill, to startle, to rouse anger; even to instruct, so long as it is not in a pedantic way. But in modern days the foundation must consist of a good technique, for it is in the spirit of the epoch to exact truth and fine workmanship in particulars before allowing the artist to generalize into larger work.

Dr. Coues's "Birds of the Colorado Valley."

WHEN Dr. Elliott Coues says "I have taken pains," we have a right to expect something to come of it; nor in reading the last work of this well-known author and naturalist are we disappointed in anything affecting its value. It is to be regarded as the most important addition to American ornithology since Baird, Brewer and Ridgway's "History." The eastern half of the United States long ago found its bird-biographers, and certain limited districts have received great attention. Various writers have contributed to our knowledge of the distribution in Mississippi Valley, the plains and the eastern foot-hills of the Rocky Mountains. Dr. Coues himself, in his "Birds of the North-west," gave us a hand-book for the Missouri region. Henshaw and Ridgway have treated the interior basin, and Dr. Cooper the Pacific coast, while Sennett and Merrill have informed us of the birds of Western Texas. The only region, then, awaiting description was the arid south-western corner of the Union.

The rather indefinite limits which the present author

* Birds of the Colorado Valley. A Repository of Scientific and Popular Information concerning North American Ornithology. By Dr. Elliott Coues. Part First—Passeres to Laniidae. Bibliographical Appendix, seventy illustrations (woodcuts). 8vo. pp. xvi. 807. Washington: Government Printing Office, 1878. "Miscellaneous Publications, No. 11" of the United States Geological Survey of the Territories; F. V. Hayden, U. S. Geologist-in-charge.

assigns to himself are large—the Colorado Valley being held to include at least the great triangle having the Staked Plain as its eastern corner, and Great Salt Lake for its northern angle, while the southwestern corner touches the Pacific in Southern California. As this area contains all sorts of physical geography and climate, he is able to include in his list nearly every species known to our avifauna, at least of land birds and fresh-water fowl; and what he cannot strain his conscience enough to allow himself to call a Colorado Valley bird, he at any rate can name in a foot-note. We are thus furnished with a complete hand-book of North American ornithology up to date, and under each name its full synonymy and technical description, by which it may be identified. To this matter of synonymy particular attention has been paid, and it is astonishing how Dr. Coues has been able to hunt down to its last refuge not only every detail of information upon nomenclature and classification, but the whys and wherefores of each, until he has produced a parallel to the profound theological treatises of some of the old school-men, and has conferred a debt upon all students to come, besides erecting a lasting monument to his erudition.

A year or two ago, in the columns of a New York journal, it was jocosely suggested to Dr. Coues that he stop "collecting" in the West, and find out for us how the birds there acted, and sung, and looked after their families. "I stuck a pin through that sentence," said our author, afterward. And so it seems; for the dead birds are pretty much all in the fine print, and here in the larger text the living presence flits before us, entrancing the eye by its grace, and captivating the ear with its tuneful voice. No one but a man of Dr. Coues's wide experience in field observation, no one without his quick eye, ready memory and impressive heart could catch so faithfully the spirit of the bird-life which throngs our western mountains and valleys. Even where (as not generally) he has seen fit to write at length of well-known species,—like his favorites, the swallows,—a new charm attaches to the familiar bird.

Dr. Coues shows a remarkable faculty in suddenly turning from close diagnosis of technical characters or the involved history of an obscure name, to racy and poetic description of the birds' haunts and habits. But the critic will note in many of the descriptions evidences of too great haste and a somewhat heedless disregard of good "style."

The present part carries the work to the end of the family of shrikes, at which rate four or five volumes more will be needed to complete the whole, which, when finished, will be a thorough manual of our ornithology. An appendix contains about 1,500 titles of bibliography, part of a General Bibliography of Ornithology which Dr. Coues has in preparation. It is prepared with the utmost thoroughness and care, and will prove an invaluable guide to students. The indexes to the volume are very full, and the typography, like most work from the government's printing office, is excellent, though it is a pity that paper of two strikingly different tints should have been used.

Busch's "Bismarck in the Franco-German War."

ANY minute account of the doings and sayings of Bismarck during that surprising year when France was unseated from the political sovereignty of Europe to make place for Germany would be instructive and amusing, but the personal characteristics of Dr. Moritz Busch add a special zest to this account. He is one of those useful persons whom a great man often attracts,—a dependent so absorbed in admiration of his chief that the smallest and silliest trifles, when done by the superior, assume the proportions of things really noteworthy. That Bismarck recognized this quality at once appears from Busch's proud recital of how the great chancellor called him by such pet names as *Büschlein* and *Büschchen*, apparently unable to understand that along with a certain amount of kindly feeling the elephantine sportiveness of these diminutives of Bismarck expressed a fair share of contempt.

Busch, although a Saxon by birth, surpasses Prussians in his abject reverence for power and rank. He notes every slightest word of his chief, and many of the answers made at table by guests of various ranks and conditions. The remarks were noted within half an hour of the time they were made and the report has every sign of accuracy and authenticity. It would be surprising if so much violent, coarse and bigoted talk should be untrue to fact, especially as the recorder of it is an adorer of Bismarck, and as it agrees perfectly with other reports of the man of "blood and iron." Bismarck incarnates the hatred of the French which has floated about Germany for the last two centuries, more among the common people than among those of rank and intelligence; he hates them with the ferocity of a wolf. The first volume is full of rancor. The second, which covers the anxious days before Paris, when the military men hesitated to bombard the city, contains constant notices of his bloodthirsty spirit:

"About eleven a telegram came in from Verdy about the sortie this morning. It was directed against La Haye, and about 500 red-breches were taken prisoners. The chief complained bitterly that they would go on taking prisoners, instead of shooting them down at once.

"We had more than enough prisoners," he said, 'already, and the Parisians were relieved of so many 'consumers,' whom we shall have to feed, and for whom we had no room.'"

The transparent Busch has no thought of concealing these villainous traits of his idol; doubtless he thinks himself too small a creature to sit in judgment on such a demi-god. He also shows his own rancor. Where it touches the French, it is merely a pale reflection of Bismarck's; where it relates to others, it shows itself in a grotesquely weak manner. One of Bismarck's *aides*, an old bureaucrat named Abeken, is the person against whom little Busch shoots his small venomous shafts. Abeken, being dead, cannot defend himself, so Busch has it all his own way. There is another Busch in Germany who writes almost the only really humorous books

* Bismarck in the Franco-German War, 1870-1871. Authorized translation from the German of Dr. Moritz Busch. New York: Charles Scribner's Sons.

the new empire produces, but even he is hardly so grotesque in his intentional caricatures as his namesake in his unconscious folly. When the agreements were signed which settled the business of German unity and the elevation of the king to be emperor, Busch at once implored Bismarck for the pen with which the agreement was signed. "In God's name," said Bismarck, "take all three, if you like."

A notable fact in Bismarck's character is his superstitiousness. Atheists and positivists are charged with singular aberrations in the way of superstition, but Bismarck is always claiming for himself extreme godliness and a vivid belief in religion. He will begin nothing on Friday. One day he says everything has gone wrong, the king has detained him, important telegrams to Germany have not been sent, and public opinion has not been duly molded and manufactured,—all because it is Friday! In November, at Versailles, over a second bottle of champagne, he talks about his death and mentions the exact age at which it will happen. "I know it," he said, when somebody remonstrated; "it is a mystic number."

In the main, the translation of these memoirs has been done reasonably well. But now and then there is a slip as, for instance, where some one asked Bismarck how he managed to make old Metternich like him so much. Bismarck answers: "Well, I will tell you. I listened peaceably to all his stories, only pushing the clock several times till it rang again. That pleases these talkative old men." Here clock is doubtless translated from *glocke* and should be rendered "bell."

Cornwell's "The Land of Dreams, and Other Poems."

MR. CORNWELL will hold a permanent, though not a prominent, place among the poets of America, we think, but it will not be for the poems upon which he has bestowed most labor, and which he probably values more highly than his careless, off-hand effusions. His most ambitious poem, "The Land of Dreams," is by no means his best, for, not to insist upon its being too long, it is far too elaborate. The subject, as he has conceived it, demanded what he could not give it—imaginative treatment. What can be made of it Bryant has shown in his "Land of Dreams," which is less than one-third the length of Mr. Cornwell's poem, and is radiant throughout with imagination. Mr. Cornwell indulges in so many items and epithets that all the force of his description is lost. The same objection holds against the poem entitled "Autumn," which consists of eighteen elegiac stanzas of clever but diffused glimpses of scenery. Mr. Cornwell has considerable sympathy with nature, and when he paints it for itself alone, he abounds with happy touches. He has an eye for minute picturesqueness, and his genius (for he has genius) is at home among the little people of nature,—bees, grasshoppers, and the like. Within that circle (which,

to be sure, is a limited one) no American poet walks so well as he. We have compared him, to his disadvantage, with Mr. Bryant in his "Land of Dreams," but we can compare him with the dead master, to great advantage, in such poems as "The Crow," and "To a Grasshopper," which are immeasurably superior to all other American poems of the kind. The poem last named is worthy to rank with the famous sonnets which Hunt and Keats wrote in friendly rivalry in honor of the grasshopper and the cricket. There is a vein of joyous humor in it which reminds us of the young Hunt who wrote so charmingly about his four-year-old boy, "Ah, little ranting Johnny." He is *en rapport* with the insect life which he depicts so merrily, and which the greatest poets have not disdained to study lovingly. We think that he might add to his reputation by a series of poems such as those we have named, and if he could only invent a good fairy story, that he might easily surpass the author of "The Culpit Fay." His best companions are not his books, in spite of the pretty poem in which he asserts the contrary, but the little companions that cross his paths in the fields and woods, and whose laureate he is.

Rudolph Lindau's Stories.*

RUDOLPH LINDAU is a cosmopolite. He has lived in China, the United States, and England, as well as Germany, his home. One of his brothers is Paul Lindau, who writes the cleverest light *feuilleton* literature of the present day in Germany; another lives in New York, and is secretary of the Geographical Society. The brothers come of Lutheran parson stock and form another instance of the tendency toward letters on the part of sons of clergymen. The four short stories with which Rudolph Lindau makes his bow before an American audience prove at once his right to the title of cosmopolite. "Gordon Baldwin" is laid in Paris, among Americans and English, and also has relations with China. "The Philosopher's Pendulum" has to do with the United States and Germany. "Liquidated" is placed almost entirely on Chinese ground, but France and America are introduced. "The Seer" is confined to France, but the chief actor is a Russian. All the four stories are vivid and well conceived,—possessed of firm outlines and filled in with a good sense of color, even where the work is not first-rate.

"Gordon Baldwin" shows a careful study of Europeanized Americans, not exactly profound, it is true, but striking in its grasp of their common features. Forbes is a young American of wealth, who grows old slowly in the round of gayeties of the American colony in Paris. He knows that a woman friend of his loves him, but puts off marrying until she accepts some one else; then he begins to regret. Lindau has caught well the kind of mental and moral torpor of a club-man of that species. His woman is good,

* The Land of Dreams, and Other Poems. By Henry Sylvester Cornwell. New London: Charles Allyn.

* Gordon Baldwin. The Philosopher's Pendulum. Liquidated. The Seer. By Rudolph Lindau. New York: D. Appleton & Co., 1878. New Handy Volume Series.

too, although not very realistic. She is refined, but also shadowy. Gordon Baldwin, the friend of Forbes, who marries her at last, is well drawn. All are intrinsically uninteresting people to meet, yet Lindau makes us care what becomes of them.

"Liquidated" does not show an equal fidelity to nature, but it is still much above the average of short stories. At the end of it we get from China to Paris, where the woman, a young American, with whom two Englishmen, partners in a firm at Shanghai, are in love, sees the one whom she really loved in the theater. She has waited in vain for him, and has married a rich New Yorker. The Englishmen lost her because each was maneuvering to let the other have her, the discovery of their common love having come to them at different times,—they being such fast friends that no sacrifice is too great. One dies in China, but the other is so heart-broken over the death, which he attributes to worry and disappointment in love, that he never seeks out the woman who was the innocent cause of the tragedy.

"The Philosopher's Pendulum" takes its name from the cynical view of life of a certain German teacher in America which he illustrates by a diagram. When the pendulum swings high on one side, that of happiness, it must swing back just as far on the other, that of misery. The only hope is to reach the center, that of absolute "dead" quiet, where the pendulum "dies."

"The Seer" is a study of second sight in the person of Boris Stacovitch, and relates a number of tragic incidents. It is clever, but certainly inferior to the others. Altogether, Mr. Lindau shows great promise.

Egan's "Songs and Sonnets."*

If a poet's earliest offering may be said to peep out like the first pure crocus of the spring, this little pamphlet might well suggest the comparison. Possibly the modesty and isolation of its lyrics make them only the more attractive. Here is scarcely enough verse for criticism, or to betoken the poet's future, yet quite enough to show that Mr. Egan is a poet. More than this,—he has notes that are clear and simple, melodious, and more distinct than much of the studied warbling which young singers nowadays affect. His songs and sonnets have a natural, idyllic quality, which takes us back a generation, and shows that his instinct is to follow Keats and nature rather than Swinburne and the new romantic word-builders. Three of the sonnets, "Theocritus," "Maurice de Guérin," and "Of Flowers," will be remembered by readers of this magazine. The last named is exquisite, and all are fresh and poetic. Two versions from the father of idyllic song are neatly done, but are somewhat too modern and periphrastic. A few quaintnesses of diction are a blemish in the author's style, but these are less frequent than usual in a poet's initial venture.

* Songs and Sonnets. By Maurice F. Egan. Printed, but not published.

The Concord Summer School of Philosophy.

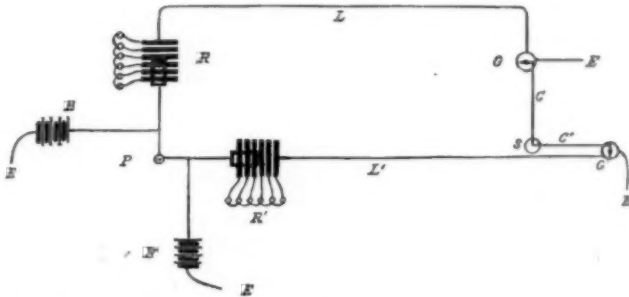
It has become common of late years to use some part of the long college vacation during summer for brief schools in which some science or combination of sciences, or languages, could be earnestly pursued by college students or professors, school teachers and persons of leisure who wish to make the most of a little time. The first conspicuous instance of this was perhaps Agassiz's Summer School of Penikese—now abandoned; but there have been many examples since.

A new variety of this sort of school is announced for the summer of 1879, at Concord, Massachusetts, —a "Summer School of Philosophy and Literature," at the head of which is Mr. A. Bronson Alcott, and which is to meet in his Orchard House every secular day for five weeks, from July 15th to August 20th. The instruction is to be given "by conference and conversation, in literature and the higher philosophy," and the instructors are five regular professors and as many special lecturers. The professors each give ten lectures, or rather, hold ten conversations, preceded by a lecture or not, as they may choose. Their names and subjects are: Mr. Alcott on "Christian Theism"; Professor W. T. Harris, of St. Louis, on "Speculative Philosophy"; Dr. H. K. Jones, of Jacksonville, Ill., on "Platonic Philosophy"; Mr. David A. Wasson, of Boston, on "Political Philosophy"; and Mrs. E. D. Cheney, of Boston, on "The History and Moral of Art." Each lecture or conversation is to have a morning or an afternoon assigned to it, commencing at 9 A. M. or 3 P. M., and continuing until the subject is exhausted, or the class must break up. The five professors have the five days from Monday to Saturday in each week, each taking one day or two half days; the five special lecturers take the five Saturdays, each giving two lectures on the same or on successive Saturdays. The announced lecturers for Saturday are F. B. Sanborn, of Concord, on "Philanthropy and Social Science"; T. W. Higginson, of Cambridge, on "Modern Literature"; Thomas Davidson, of Boston, on "Greek Life and Literature"; and George A. Howison, of Boston, on "Philosophy from Descartes to Hegel." It is understood that Mr. Emerson, though not pledged to do so, may read a lecture or two, and probably Professor Pierce, of Cambridge, will do the same. The number of pupils in this school is practically limited to fifty; that being as many as can be conveniently received in Mr. Alcott's house; and all the students are required to register themselves early in June. The fees for all the classes will be fifteen dollars; for a single class of ten conversations, three dollars. Students of any age, and of either sex, are received, and it is not required that they pass any preliminary examination, nor that they shall reside in Concord during the term, the hours being so arranged that, if they choose, they may live in Boston, Cambridge, or any town within thirty miles of Concord. The pupils already registered are from all parts of the country, many of them of mature age, and accom-

plished in various studies and professions. In fine weather, the classes will meet in the orchard or the grove, near Mr. Alcott's house, which is pictured in SCRIBNER for February, and which stands on the Lexington Road, next to Hawthorne's "Wayside."

Possibly this experiment, which Mr. Alcott has long intended to try, may result in a permanent school during a portion of the year for the prosecution of those studies that have so long given Concord a name in the world.

THE WORLD'S WORK.



The Writing Telegraph.

COPYING and autographic telegraphs have already been made the subject of experiment, but in all the apparatus already tried the mechanism is too complicated to be of much practical value in ordinary telegraphy. A more recent invention, called the writing telegraph, reproduces at the distant end of a telegraph line marks, letters and words by means at once simple and ingenious. The mechanical principle upon which the new writing telegraph is founded is the familiar law of resultant motion when two opposing forces are combined. The electrical part of the invention consists of suitable apparatus for transferring over wires these two forces and recomposing them into a resultant motion that shall exactly resemble the original motion. To make this clear it must be observed that the action of a pen or pencil in writing is twofold. There is the up-and-down stroke and the lateral movement of the pen along the paper, the curved letters being the resultant of these two opposing motions. In the writing telegraph we have an upright pen fixed in one position, but with the point free to move in two directions, up and down and from side to side.

The above figure is an ideal sketch of the apparatus. The writing pen, P, is held in the hand and is used in forming the letters on a strip of paper that moves under it. To P is fastened at right angles two arms or rods, bearing at the ends metallic plates. At R and R' are sets of metal plates standing on edge and isolated from each other by layers of paper soaked in paraffine, each plate being connected by wire with a resistance coil. The flat plates at the ends of the rods rest on the edges of these upright plates and are

free to slide to and fro covering a greater or less number of them as they move. At B and B' are batteries with lines to earth and at L and L' are the line wires. It will be seen that as the pen is moved in writing, the rods pull the plates to and fro, and as these plates slide they short-circuit the current in the resistance apparatus, cutting out a greater or less number of the coils and thus continually altering the electrical resistance in the line wires. The up-and-down strokes of the pen alter the resistance in the line, L, and the lateral strokes change the resistance in the line, L', and as the movement of the pen in forming a curve is the resultant of two motions, each motion is given to the line in its exact proportion; in other words, the resultant mechanical motion is expressed in electrical resistances of more or less value. At the receiving end of the double line are two galvanometers, G and G', the line, L, being connected to G, and the line, L', to G', and from each to earth. The needle of each galvanometer is balanced, and from the point of each needle is taken a delicate cord, marked c and c'. At S is a self-inking style, or pen, suspended by a thread and free to move in any direction. The cords, c and c' are fastened to the style, S, and opposite to each are delicate springs not shown in the figure. These springs exactly balance the strain on the cords from the needles as long as the resistance in the lines is constant and the needles remain at rest. The operation of the apparatus may now be easily understood. The movement of the pen changes the electrical resistance in each of the lines, the up-and-down stroke affecting one line, the lateral strokes the other. The needles of the galvanometers swing to and fro under these changes in

Telegram from our own correspondent

SAMPLE OF WRITING BY TELEGRAPH.

electrical resistance and pull the style in opposite directions. If, now, the pen describes a curve that is the resultant of two motions, the resistance in each line is changed in corresponding degree, precisely as if the curved motion had been split into its two right-angled motions and translated into electrical resistances of equal or unequal value. The needles pull the style in two directions at the same time, and as it cannot follow both motions, it takes a path between them that is the result of the two forces and reproduces the original curve made by the pen. The strip of paper under the style moves by clock-work, ink flows from the style and traces the curves and marks made by the pen; in fact, reproduces the message written by the pen at the other end of the line. The details of this remarkable invention have been worked out in a simple and tolerably successful manner.

We present a sample of the writing as received on two wires at a distance of forty miles. The writing is sufficiently clear for all practical purposes, and though the apparatus works rather slowly, it may yet reach a valuable practical position in telegraphy. At its present stage it has demonstrated that hand-writing can be transmitted with precision over long distances, and the further development of the invention may be awaited with considerable interest. The invention is English in origin and was first used between London and Brighton.

Tubular Piles.

IN sinking tubular piles in deep water and in putting down driven wells it has been the custom to drive the pile or pipe by striking on the top of the tubes. This answers very well for short tubes, but in sinking deep wells and long piles it has been found better to deliver the blows of the weight or hammer at the bottom of the pile. A long cylindrical weight designed to strike on the flat head of the steel point, or toe, of the pile is suspended inside the tube and let fall on the point, the tube itself acting as a guide for the weight. It is claimed that by this method long piles are driven with facility and precision, all danger of bending the pipe or driving it out of perpendicular being avoided. This method of driving tubes in the ground has suggested a very useful form of iron base for lamp, signal, tent and telegraph poles. An iron tube with steel point and heavy flange at the top is driven into the ground by means of the cylindrical weight till the flange is level with the surface. The telegraph, lamp, or other post of iron, has a similar flange designed to fit the flange on the tube, and the two may be screwed together. For wooden posts a cast-iron socket may be provided and screwed to the flanged tube. Such an iron tube driven in the ground would be useful for a variety of purposes when a firm and permanent base is wanted.

New Preservative Agent.

DURING some experiments in separating sugar from molasses a double salt of borate of potassium and sodium was found that proved to have valuable antiseptic properties. This salt is now manufactured

on a commercial scale, and costs about ten cents a kilogram. It is obtained by dissolving in water equal quantities of chloride of potassium, nitrate of sodium and boric acid, filtering and evaporating to dryness. The salt is said to be quite deliquescent and must be kept in tight bottles. It is quick in action, retains its qualities for a long time and has no injurious effect on the taste, smell, or healthfulness of the substances to which it is applied. It has already found a use in making sausages, in preserving meats, in tanning and in butter-making. A small quantity of the salt added to milk will preserve it in good condition for a week. It is also used in preserving beers and wines and is being made the subject of experiment in several other directions.

Memoranda.

CARBON desulphide has been tried with success in extinguishing fires in chimneys and other confined places. A few kilograms burned on the hearth of a chimney that is on fire has been found sufficient to extinguish the fire without injury to the house or furniture. The combustion of the carbon desulphide produces great volumes of carbonic and sulphurous acid gases which rise in the chimney and smother the fire. From experiment it has been found that out of 319 burning chimneys, 251 were extinguished in this manner without other assistance and without even disarranging the furniture of the rooms where the fires occurred.

A new form of thermo-regulator employs the varying tension of a saturated vapor under the influence of changing temperature as a means of controlling the flow of gas in a gas-stove and thus maintaining a fixed temperature. A small vessel containing methylic ether and connected with a mercury manometer is attached to a gas-stove intended to be kept at a fixed temperature, the movements of the manometer controlling the flow of gas. So sensitive is the apparatus that a stove has been maintained within one-tenth of a degree of a given temperature, this precision being obtained by the small mass of the vapor and the rapidity with which its tension changes under slight variations of the temperature.

The patent law restrictions laid on the use of the common process of nickel-plating have led to experiments in other directions to secure the same end, and a new process is announced by Professor Stratbo that is said to be both simple and effective. To a solution of from five to ten per cent. of chloride of zinc, sufficient nickel sulphide is added to give it a decided green color, when the solution may be raised to a boiling point in a porcelain vessel. The articles to be plated, thoroughly cleaned from oxide and grease, are suspended in the boiling solution for from thirty to sixty minutes, or till well covered. They may then be taken out, washed in water in which a little chalk is suspended, dried and polished. By employing a cobalt salt in place of the nickel, a plating of cobalt may be obtained. This process is not patented.

BRIC-À-BRAC.

Beside the Brook.

BY GEORGE HIRSHVE.

"I GO a-fishing!" and he sped
With rod and line, where by-paths led
'Neath latticed boughs, beside the brook
Where fish were lured with cunning hook.

"I'll read in solitude awhile!"
With favorite book, and morning smile,
Through winding ways, she sought the nook
She loved the best, beside the brook.

Later, I passed; the line and book
Were queerly twined, beside the brook;
While, in the grove, the angler's prize
Was reading love-songs in his eyes.

Two Prima-donnas.

HEARING that the two prima-donnas, Mesdemoiselles May and June, were in town; the one packing up her wardrobe, getting ready for her intended professional tour round the world; the other just arrived for her promised series of performances in New York and its vicinity; our musical reporter, ever alert, and with a keen eye for any affair combining business and pleasure, called, the other morning, first upon one lady and then upon the other, and sending up his card, requested the pleasure of an interview. This was most graciously granted, and he has sent us the following notes made on his return, which we hope our readers will not think it a breach of confidence on our part to print.

Mlle. May was in her parlor, engaged in looking over her dresses, and planning how to pack them without musing them. The room, though somewhat in disorder, looked so airily elegant in its impromptu decoration that the reporter wished, to himself, some of his friends could see it who were putting themselves to much trouble and expense in house-furnishing with less decorative effect than here seemed the result of accident. On the walls were the portraits of a few old English and early French poets, twisted about with wreaths of wild flowers, violets and daffodils, columbines and anemones, while, set about the room in glasses, were posies of hyacinths, tulips and narcissus, trophies of the prima-donna's first appearance in the season, showered upon her by the young collegians and the school-girls. Here and there, flung over the backs of chairs and sofas, were the dresses in which she had played some of her most popular parts. Here was a scarf like a rainbow, over a clouded silk, in hue the pigeon's breast; here was a robe of showery gauze, with a soft footing of grass and wild-flowers for a border. But, the prettiest dress was pearl and rose, like a cirrus sky at dawning, with rucheings of the west wind, and a flight of blue-birds over the left shoulder.

Mlle. May, so our reporter thought, had her countenance troubled as he entered the room. But

reporters are so used to meeting troubled looks, he hardly gave it a second thought. He said to himself, with a creature so young, and rich, and happy, as this, trouble could only be an affair of a crumpled rose-leaf in her bed. Still, he gallantly expressed a hope that she was quite well—an unlucky turn, for as she essayed the conventional fib in reply, a tear that was lingering, loth to leave, in her forget-me-not eyes, slipped the thickset hedge of her dark lashes, rolled from her cheek, and joined the other dew-drops on the bouquet of roses in her bosom. There could be no denying, after this, that something had gone wrong with her, and pushing away, just tasted, her breakfast of shad with the early roes, and fresh eggs and Philadelphia butter, she frankly told the reporter what the matter was.

"All the world," she said, "and the newspapers, are complaining of the coldness of my manners, and declaring that my voice nowadays is always accompanied by a light catarh. They admit that I have warmed up a little in these latter days, but not enough, they think, to counterbalance the chill I gave on my first appearance. One critic, who will be satisfied with nothing short of perfection, declares that, all the season through, I have never once reached strawberries *in alt*, though he admits that my *crescendo* in asparagus and green peas was fairly fair. In short, every one has his fling at me, and I half wish I had never come at all. The truth is," she ran on, "the coldness you complain of isn't my fault, 'tis yours. It comes from lack of sympathy. In old times, when Chaucer there, and Ben, and Spenser, were alive, I was always welcome, and they sang such sweet things about me 'twas like a divine infection, and everybody, young and old, gentle and simple, loved to do me honor. 'And fairer than the May with flowers new,' sang my best beloved poet, Chaucer; he set the note, and all the world sang after him. But, now," she sighed, "all this is sadly altered, and in this prosaic country of yours, I am become the synonym for mere utility. My birthday, with its flower-wreathed pole and dance of girls and boys; its hunt in wood and meadow for flowers; the glad cries when the first bloodroot blossoms were found like a belated snow-drift by the stone wall; or when the tinkle of the brooks led to where the spotted leaves and tawny bells of the dog-tooth violet made its borders gay, or the anemone shook with fear at the slightest whisper of the wind—this day is now a day for 'moving,' as you call it; of all days in the year the one chosen for making yourselves miserable! You laugh at May-day flowers, and insist that all your children fetch home from their May-day rambles in the cold, is, croup instead of crocuses, mumps for anemones, and an occasional dog-tooth in their violet legs. The truth is, you don't love me any longer, any of you—you needn't jump so, Mr. Reporter, I didn't mean to be personal!—if you did, you'd find sweet Will was right, and that love does lend a precious seeing to the eye.

You'd find my dresses as pretty as ever, my voice as tuneful as when I lulled my Chaucer to sleep with it among my daisies, and you wouldn't think my beauty all gone, either."

Here her voice went off in a sigh, a dash of tears clouded her blue eye to a tender gray, her cheek turned pale as when the aspen shows the under side of its leaves, and snatching up a bewitching Viroto bonnet that suggested a straw bee-hive, with lots of thyme, and with honeysuckle ribbons, and throwing round her shoulders a scarf embroidered with arbutus blossoms by her own class in Decorative Art, she gave our dazzled reporter a courtesy like the dip of a swallow, "and fled, in light, away."

June came forward to meet our reporter with her hands full of roses, just sent in, she said, by her friend the south-west wind. The new prima-donna is a buxom beauty, with hair of a color seldom seen, —something between chestnut and black, like the leaves of the copper-beech. With this go eyes of melting gray, soft as moonlight, when she is serious, and with lambent flashes of heat-lightning, when things go wrong. This morning she seemed in the best of humors. The piano was open ('twas a spring Chickering) and our young friend naturally expressed a desire to hear the lady sing. "Certainly," she said, in her velvet voice. "What would you like? There are lots of new songs. There's the 'Oriole's Barcarole'; here's a pretty *suite* by Jenny Wren; the 'Cat-bird *Valse à deux-temps*' is very clever, and so is the 'Robin-red-breast *Galop*.' But, what suits me best is this 'Owl's *Nocturne*'! What a thing it is to listen to, on a moonlight arm-in-arm!"

As she sat, and ran her fingers over the keys, our heart-shaken reporter wished he might stop there forever. For the room was like a bower of roses, with wandering scent of fresh-cut grass, and sweet syringa; and that ripe, rich voice went lilting along in careless ease; now like a leaping brook, now like a welling river, now trembling with love-whispers in pleached bowers shut from espials, or laughing with children tumbled in play upon the lawn, or cooing with the baby on its mother's breast. Certainly, if all he reports be true, great pleasure is in store for us from June's singing, for life and the delight of living, and all the sweetness of the summer, are in her voice, and her open-air concerts are sure to have an immense popularity.

C. C.

Uncle Mellick dines with his Master.

OL' marster is a cur'us man, as sho as yo' is born! I's wukkin in de crib one day a-shellin' o' some corn, An' he was standin' at de do';—I "knowed it"? no, sah, not!
Or, fo' de king! dese jaws uv mine, I'd sh'ly kept 'em shot.
But to Bru. Simon, shellin' too, what should I do but say:
"I's starvin' sence I lars has eat—a week ago to-day."
Den marster cussed and hollered: "Here's a shame an' a dusgrace!
I, so long a planter,—a starved nigger on my place!

Come, Mellick, drap dat corn an' walk straight to de house wid me;
A starvin' nigger on my place's a thing shall nebber be."

"Hi! *me* eat 'long de white folks, sah?" "Yes, Mellick, take a seat."
Den to missis: "Dis starved nigger I's done fotch to make 'im eat,"—
An' he drawed a big revolvah an' he drapped it by he plate,—
"Gub 'im soup! an' 'twixt de swallers, don' lemme see yo' wait."
Dat soup was fine, I tell yo', an' I hide it mighty soon;—
One eye sot on de pistol an' de turrer on de spoon.
"Fish for Mellick, in a hurry, he's a-starvin', don't yo' see?"
(Dem mizable house-niggers tucked dar heads an' larfed at me.)
An' I went for dat red-snapper like de big fish for de small;—
Glarnced at de navy-shooter onct, den swallered bones an' all.

"Gub 'im tucky, ham an' aigs, rice, taters, spinach, sparrergrars,
Bread, hom'ny, mutton, chicken, beef, corn, turnips, apple-sars,
Peas, cabbage, aig-plant, artichoke"—(Dat pistol still in view,
An' de white folks dey all larfin', an' dem silly niggers, too)—
"Termaters, carrots, pahsnips, beets"—("When *is* he gwine git done?")—
"Squash, punkin, beans an' kercumbers,—eat, Mellick, don't leabe none;
For dis here day's done brung to me a shame an' a dusgrace;—
I, so long a planter,—a starved nigger on my place!"

Dem things ef I'd be'n by myself, I'd soon put out o' sight;
But de com'cal sitiuation dar, it spile my appetite:
I had to wrastle wid dem wittles hard enough dat day!
Till "Now champagne for Mellick!" I heard ole marster say.
When dat nigger shoot de bottle by my hade—I's sho'ly skeered;
Dat stuff it look so b'ilin' hot, to drink it I wuz feared;
But arter I'd done swallered down a giars, I feel so fine,
I 'gin de sitiuation not so very much to min';—
An' den a little restin' spell I sorter tried to take,
But, Lor'! ole marster hollered: "Gub 'im pud-din', pie an' cake!"—
—Wid he han' upon de pistol an' de debbel in he eye!—
"An', Mellick, down wid all!—onless yo' is prepar'd to die."

I hurried home dem goodies like I hudn't eat dat day;
Tell marster see I couldn't pack anoder crumb away;
An' den he say: "Now, Mellick, to de crib, git up an' go!
An' de naix time yo' is starvin' come to me an' lemme know."
But, Lor', in dat ar bizniss I kin nebber show my face;—
An' dar's nebber been anoder starvin' nigger on de place!
J. R. EGGLESTON.